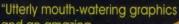


The hit coin-op game bringing espionage and action with 9 levels of thrills and excitement. Innovative game features with a host of differing scenarios from high-powered sports cars to underwater guerilla warfare. Rescue a beleaguered nation from the oppressive regime of the 'Council for World Domination'.

ESPIONAGE EXTRAVAGANZA
FEATURING 9 LEVELS OF HIGH ACTION!



and an amazing depth of play ... the best flight simulation I have ever seen (and there's nothing on the visible horizon that looks set to come close). It's not a simulation, it's an experience ... Ocean's first flight sim is the best out!" Zzap 97%.















MUSIC 111

What to buy if you have £750,000 to spend!



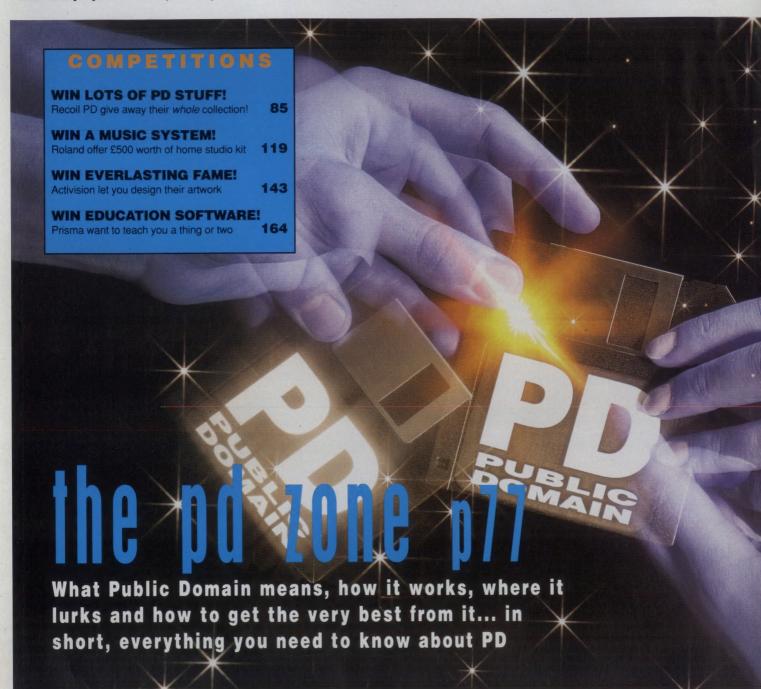
VIDEO 28

G2 VideoCentre - A Genlock and a Half



TOOLED UP 101

Tools of the Programming Trade



EDITOR Bob Wade DEPUTY EDITOR Damien Noonan REVIEWS EDITOR Trenton Webb STAFF WRITER Maff Evans ART EDITOR Marcus 'Dr' Dyson DESIGN ASSISTANT Paul Morgan EDITORIAL ASSISTANT Mark Hill DISK EDITOR Richard Monteiro CONTRIBUTING EDITORS Jon Bates (Music), Brian Larkman (Graphics) CONTRIBUTORS Neil Davey, Mark Smiddy, Tim Smith, Pat McDonald, Colin Campbell, Paul Lyons, Andy Storer, Keith Pomfret ADVERTISING MANAGER Jennie Evans AD SALES EXECUTIVE Paul Steer AD PRODUCTION Fiona Milne AD SERVICES Jo Fulton PUBLISHER Greg Ingham ASSISTANT PUBLISHER Jane Richardson LINOTRON Patrick Leith, Dirk Murlebach, Chris Stocker.

PHOTOGRAPHY Ashton James, Bradford-upon-Avon COLOUR ORIGINATORS Swift Graphics Ltd, Southampton, PRINTERS Riverside Press Ltd, St Ives PLC, Gillingham DISTRIBUTORS SM Distribution, 6 Leigham Court Road, Streatham, London SW16.



© FUTURE PUBLISHING 1990.

Amiga Format comes to you from the company that publishes ST Format, New Computer Express, Amstrad Action, Your Sinclair, S – The SEGA mag, PC Plus, 8000 Plus, MacPublishing, Classic CD and Commodore Format

EDITORIAL/ADVERTISING

30 Monmouth Street, Bath, BA1 2BW. # 0225 442244 FAX: 0225 446019

SUBSCRIPTIONS/MAIL ORDER

The Old Barn, Somerton, Somerset TA11 7PY = 0458 74011

COVERDISK HOTLINE

We welcome written enquiries, but regret that we cannot offer advice, guidance or information on a personal basis, either by telephone or post. We welcome contributions from readers but unfortunately cannot guarantee to return material submitted to us, nor can we enter into personal correspondence. We take great care to ensure what we publish is accurate but we cannot accept liability for any mistakes or misprints. No part of this magazine may be reproduced in any form without our permission.



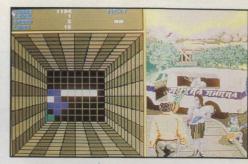
FREAKED OUT 31

Mandala - bizarre interactive activities



MOTORBIKES 48

Is Harley Davidson really a good ride?



MENTAL OVERLOAD 59

Welltris - a whole new shape game

Contents SPECIALS REVIEWS **VIRTUAL AMIGAS G2 VIDEOCENTER** The interactive Mandala system 31 High-quality genlocking from G2 28 **ENTERING THE PD ZONE MAGELLAN** The world of PD is opened up for you 77 Expert Systems with Emerald Intelligence 137 TRICKS WITH COPPERS MOUSESTICK Graphics techniques at hardware level 119 The clever joystick from Advanced Gravis **TOOLS OF THE TRADE** A full round-up of tools for programming with 101 SCREENPLAY SCHOOL HOLIDAYS FORMAT GOLD Another dip into educational software... 159 **DAMOCLES** 36 REGULARS REVIEWED **NEWS** FLOOD 39 What's happening in the Amiga world... **MIDNIGHT RAIDERS** 40 **SHADOW WARRIORS** 40 **COMING ATTRACTIONS BLOCK OUT** All the newest games previewed 41 ANTAGO 42 **GRAPHICS PYRAMAX** 42 Special Effects - Turbo Silver reviewed MURDER 45 **PD UPDATE EMLYN HUGHES SOCCER** 46 New moves in the world of free software 95 **EVERTON FC INTELLIGENSIA** 46 HARLEY DAVIDSON 48 MUSIC **COMBO RACER** 51 The kit film-makers use to make soundtracks 111 WILDLIFE 51 WORKBENCH **RED STORM RISING** 52 A selection of the best hints and tips 121 **POLICE QUEST 2 BREACH 2** 56 **GAMEBUSTERS WELLTRIS** 59 Tips, maps and guides to busting games 149 LOST PATROL 60 **LETTERS** TUSKER Correspondence on many issues 169 **PHOTON STORM** 66 LAST NINJA 2 **GURU** 68 The triumphant climax of the magazine 178 **NEUROMANCER** 71

SUBSCRIBE NOW!

If you read Amiga Format every month, why not make sure of your copy by getting it delivered straight to your door? Save hassle, save money and get a free game, too!

See Page 135 for details!



Member of the Audit Bureau of Circulations
40,371 Jul-Dec 1989



YOLANDA

HERCULEAN TASKS POSED IN PLATFORM FORM FROM MILLENNIUM

BRIMBLE'S BEAT: Bach goes modern in Allister Brimble's musical interlude
■ ZOOM: Small, but perfectly-formed screen blanker, mouse accelerator and CLI
summoner ■ MOUSE COORDS: Keep a track on where your mouse is

SYS

REALLY RATHER MARVELLOUS COMPLETE PLAYABLE GAME

FSDIR: Speed up your disk drive and quieten it too ■ RAPS: An excellent cross between draughts and noughts and crosses■ WORKBENCH HACKS: Ahem!

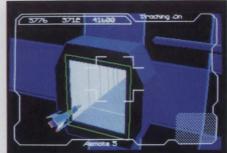


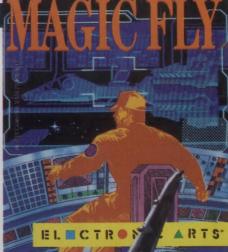
We Interrupt this Magazine

MAGIC FLYTM Available in September for Amiga/Atari ST

You're a fighter pilot of the future - travelling through a giant asteroid in your vehicle the Magic Fly. Your aim is to destroy key parts of the complex and discover the space fighter codenamed the Moth.

• Over 30 different spacecraft to scan and shoot. Feel your skin creep as you see a Black Widow or Tarantula crawl towards you. • A vast and complex network of tunnels to explore, providing hours of gameplay. • Selection of weapons - 3 types of lasers, missiles and a range of superweapons, like the Cat, Limper and the Atomic Sledgehammer! • Solid 3D graphics.







Available in September for Amiga/Atari ST. Out now for PC!

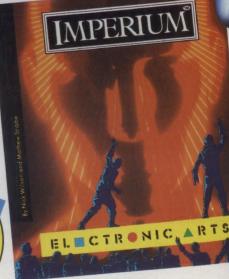
Experience white knuckle flying thrills with the great flight trainer. Now fly any of 18 different aircraft, all with accurate aerodynamics and realistic 3D modelled graphics. Join the US Navy's Blue Angels or the USAF Thunderbirds in formation, or race 6 courses. Other features include more realistic terrain, unlimited camera angles and night flying. Let General Yeager personally guide you through AFT 2.0, sharing his tips and great flying experiences on the new Flying Insights™ audio tape, included FREE in every package.

our latest news.

- ...did you know there is a Flood demo disk available at your retailers?
- ...be on the look-out for previews of PowerMonger from Bullfrog, the authors of
- ..our first CD game was released in Japan. Now FM-Towns owners can play Populous, a world-wide phenomenon!

Electronic Arts 11/49 Station Road Langley, Berks SL3 8YN England Tel: (0753) 49442





☆ Golden Scroll-The Games Machine

for some Exciting Programs

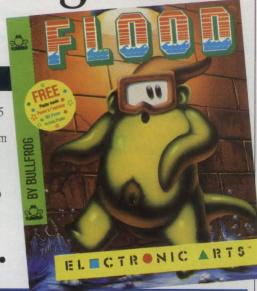
FLOOD™ Out Now (and receiving rave reviews) for Amiga/Atari ST Colour

☆ C&VG Hit ☆ Zero Hero ☆ Gen d'or ☆ ST Format Gold ☆ CU Screen Star



A platform game with a sense of humour and over 35 addictive levels. Help Quiffy escape from the underground caverns to the Earth's surface away from such nasties as the Psycho Teddies and the Creeping doom of the Flood.

● Whacky objects like boomerangs, flame throwers, balloons and spacehoppers ● Humorous monsters to destroy from Bulbous Headed Vongs to Vacuous Gombos. ● Passwords – no need to start from the beginning again! ● Watch Quiffy grip to almost anything – even the ceiling. ● Gurgling tunes and splashy sound effects. ● Numerous puzzles to solve. ● Secret locations.





EL CTRONIC ARTS

The view of magazines and Amiga owners alike is unanimous: AMOS - The Creator is an astonishing piece of software. Now, for the first time, you can exploit to the full the awesome power of your Amiga. Whatever you want to create, AMOS will turn your dreams into reality.

What the press say:

It's better than we ever hoped for. It's such an easy system to get to grips with, but staggeringly open-ended, so that any Amiga owner can benefit from it. It's wonderful and worth every penny. Popular Computing Weekly, July 5-11

ESOM

"A must for Amiga users who would like to be able to develop their own games, but can't face the thought of learning machine code." ACE. August

"An incredible product that should create more incredible products. It looks like the days of the machine-code programmer are numbered." Commodore User, August

"Can AMOS be used to produce commercial-quality games? The answer seems undoubtedly 'Yes'. No other language will let you do so much with so little effort. For producing programs that need to use ultra-fast graphics and animation, super-smooth scrolling and scintillating sound, there is only one choice... and it's name is AMOS" Amiga Format, August



WHAT YOU GET:

AMOS Basic, sprite designer, Magic Forest and Amosteroids arcade games, Castle AMOS graphical adventure, Number Leap educational game, 300-page manual with more than 80 example programs on disc, sample tunes, AMOS Club Newsletter ... and more!

EXTRA DISC *Free!*

Now every copy of AMOS, whether you buy it direct or from a retailer, comes with an additional disc: AMOS Extras! It's packed with useful programs: AMOS 600, AMAL Sprites (AMOS Animation Language) editor, menu editor, large text scroller, IFF brush to sprite converter, scrolling shoot-'em-up and game Soundtracker and Sonix converters.

Do you already own AMOS? Send in your registration card to obtain your free copy!

ALL THIS FOR JUST £49.99!

Our guarantee: Buy direct from us, and if you're not delighted with your purchase, return it to us within 14 days for a complete refund.

=	
	Please send me AMOS - The Creator
	and my free AMOS Extras Disc

☐ I enclose a cheque payable to Mandarin

Software for £49.99 Postage & packaging free in the UK. Add

£2 per program for Europe.

☐ Please debit my Access/Visa/Connect card number:

----Expiry date: /

Name

Address

Postcode

Send to: Database Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB. Credit card orders: Tel: 051-357 1275

What AMOS owners say:

Completely brilliant - far better than I ever imagined possible - I absolutely love it"

"Just bloody great... Simply no other software of this class available for the Amiga or PC

Simon Nicoll, Blandford

"AMOS is perfect. The Amiga was made for AMOS" K Sumpter, Swindon

"A very impressive package - without doubt the very best Basic available on the Amiga. Incredible Paul Feazey, Oxford graphics manipulation commands"

"Brilliant! I've done more with AMOS in four days than with HiSoft Basic in six months!"

JR Arkley, Woolton

"The best value for money package I have ever bought for the Amiga. I really feel that you want me to Colin Mercer, Bolton enjoy using the language."

"On par to be the best Basic language ever."

S Hawkes, West Bromwich

"Endless possibilities and uses. Congratulations!"

Michael Fletcher, Mold

"Excellent! Amazing! Brilliant! Superlative! etc etc... I love the commands and ease of use. I understand now why AMOS is called The Creator" DM Richmond, Blackpool

"This is going to be the best selling package on the Amiga! It will allow my ideas to come to life"

David Linacre, Chesterfield

"AMOS is very fast, friendly and no doubt about it, the best program for the Amiga!!"

David Harrigan, Derry

"As a previous STOS user I can't fault it. Brilliant! François does it again!!!" Neil Burton, Tidworth

"Excellent. The speed for a Basic is breathtaking" Delwyn Farr, Dukinfield

M Rackley, Stone "Simply awesome - the most impressive piece of coding I have ever seen!"

"An excellent job! AMOS is faster than I'd ever dreamed possible!"

David Milton, Welwyn Garden City

"An absolutely fantastic package that uses the Amiga to its full potential" NK Ball, Stoke-on-Trent "Everything I want to do with the Amiga can be done quickly and easily with AMOS"

Stuart Margerison, Blackburn

"Fantastic. I knocked up something in a day which would have taken a month in assembler"

Gary Symons, Bournemouth

"It's the best piece of software I've bought for the Amiga. Worth twice the price."

SA Sweet, Herne Bay

"AMOS will do for Amiga programming what the invention of fire did for civilisation"

Kevin Smith, Marden

"Looks set to be the most used piece of software ever on my Amiga"

Martin Bruce, Croyden

Derek Bere, Fradley

"The best thing that could have happened to the Amiga"

What AMOS owners are going to create:

An educational program for motorists... a graphical role-playing game... a Star Trek game... a Mandelbrot explorer... database-type programs... a platform beat-'em-up like Barbarian... scientific programs... a boxing simulation... a conversion of Star Chess... conversions of old Spectrum classics... video titling software... an evolution simulator... printed circuit board designer... a football game... a Speedball-type game... a flight simulator... small business accounts... a cricket management game... a tactical wargame... producing plans of archaeological sites... home finance package... flashy scrolling demos - and this is just the beginning!

Unleash your imagination - get AMOS now!

ALL SYSTEMS GO FOR C Extensive software support for Commodore's new baby NEWS NORTH OR THE Above: Graham Brown Martin, chairman of Cz Commodore **Next Technology.** Middle: Three views of Impressions' CDTV title Legend of the Lost, now under development. Far Right: The BBCconnected Multimedia Corporation are already involved in CDTV work.

The signs are already excellent for Commodore's new home entertainment centre, the Commodore Dynamic Total Vision. In the few weeks since its launch at the CES Show in the US (see last issue's news pages), companies such as Next Technology, The Multimedia Corporation and many games software houses are already committed to developing software for it.

Next are already experienced in the production of CD-ROM products and amongst the titles they are working on for the CDTV is the 'Welcome' disc that will come with every system. Next will also be providing support to other developers, using their 'Pressed for Time' CD-ROM production service.

Graham Brown-Martin, chairman of Next Technology, enthused over CDTV: "Commodore has stolen a march on the rest of the industry with CDTV and has a real opportunity to become market leader with a product of this type. I'm delighted that we're so closely involved in such an innovative product which has the ability to change the face of education, home entertainment and computerbased training."

Another prestigious company committed to the CDTV is The Multimedia Corporation, a recently formed group that are an associated company of the BBC. They already produce video disc and CD-ROM software for the Apple Macintosh and PCs, and now they are turning their attention to the CDTV. Here's what producer Ted Barnes had to say about their plans: "We will publish titles that appeal to general audiences... we

want to pioneer new kinds of television programmes which CDTV viewers will watch as an alternative to VHS films or ordinary broadcast television."

The Multimedia Corporation are also on the lookout for top class Amiga programmers to join them - if you think you could fit the bill then why not get in contact with them? Call them on 071 722 7595 or write to them at their address of 109X Regent's Park Road, London NW1 8UR.

Games software houses have also been quick to respond to the CDTV (see below) and if this mixture of applications, general entertainment and games software continues it should guarantee the success of the machine.

CDTV Fun and Games takes off

Software houses currently working on titles for the CDTV include Ocean and Psygnosis. Psygnosis are keeping quiet about their project, but it's known that Ocean are working with game developers Maxis to bring the Sim City sequel, Sim Earth, to the system.

Impressions have announced that their forthcoming leisure title Legend of the Lost is to be converted for the CDTV. Taking full advantage of the new machine's capabilities, Legend is a multilevel arcade adventure which sets a distraught boyfriend the task of rescuing his lady from the clutches of an international crime syndicate. The CDTV version will feature four different arcade game styles, cartoon sequences, plus plenty of sampled speech and music. They aim to follow this product up with a nuclear war sim which is entitled The Final Conflict.

Also in the running for the CDTV glory stakes are CRL who have three products being coded for the machine. Laurel and Hardy, Herewith the Clues and Cult of the Severed Head are the games, but as yet release dates or prices are not fixed.

With such hardcore support from the software community the future looks good for the machine.

Mirrorsoft have scooped the licence of the year, Teenage Mutant Hero Turtles. The lovable reptiles will be appearing shortly on all formats. Mirrorsoft will be doing their own coding for the Spectrum, CPC and ST but will take port over code from the stateside game Teenage Mutant Ninja Turtles for C64, PC and Amiga.

Confusion seems set to reign when the Mirrorsoft Hero package hits the streets because the Ultra (Konami's US Software house) Ninja game from the States is already on the shelves as an



"Mirrorsoft import. could always ask for a stop to be put to the sales of the Ultra game. but there really doesn't seem much point" a Konami spokesperson offered. The final twist in this ironic tale is that it's Konami who sold the licence to Mirrorsoft in the first place.

Regardless of the controversy it is beyond doubt one of the biggest ever potential licences. The heroes in half a shell have already grossed an incredible \$130 milion at the cinema box office, have their own comic, cartoon TV series, hit record, appear in the Daily Mirror and have a whole lorryload of associated merchandise to ensure a high media profile even before the hype machine hits top gear.



IN THE BEGINNING THERE WAS A SWORD, THEN CAME THE ADVENTURE.



A wizard trapped in a teardrop. A magical sword. A race of mutant humanoids.

Their attempts to destroy the kingdom were thwarted by a band of fearless adventurers. In the chronicles of Anar that chapter became known as the Legend of the Sword.

Then the teardrop shattered and the wizard unleashed a plague of death and destruction upon the land. The world of Anar has one remaining hope: whoever recovers the six power crystals created when the sword was forged, may banish the wizard to the deepest pit of hell...



Final Battle, the sequel to the muchacclaimed Legend of the Sword, features a much larger vocabulary, an expanded inventory and superior graphics. Its highly sophisticated action system allows for weather changes and gives a 3D view of every location - a system at the forefront of contemporary adventuring.

When the teardrop explodes, only the brave can save the land.





New Improved Macintosh Emulator

The A-Max Macintosh Emulator has been around for over a year now in its original form – it was reviewed in *Amiga Format* Issue One. Although very well received, it did have its faults, a lack of hard drive support being one of the main omissions.

Now Entertainment International have announced not one, but two new versions of A-Max. The basic unit, A-Max II, is in the same plug-in grey plastic box as before, is aimed mainly at A500 users and is available very soon. The more advanced variation is A-Max II Plus, which comes on an internal card for the Amiga 2000 and will be out in November.

A-Max II allows full hard drive support, enabling access to partitions on an Amiga hard drive while the Mac emulator is running, which will mean that large Mac applications such as the major DTP packages will be useable. The makers claim that most popular Mac software will run fine on A-Max II, the only real problems being some copy-protected software and games.

Remember also that A-Max does require an Apple Macintosh system ROM chip to run. If you want to turn your Amiga into a Mac Plus, the basic unit will set you back £169.95 without the vital chip or £269.95 with. The advanced A-Max II Plus will cost £249.95 without or £349.95 with.

SHADOW LOOMS AT PSYGNOSIS

Psygnosis are all set to loose the Beast again, in the sequel to their graphically stunning smash hit Shadow of the Beast. Entitled, oddly enough, Shadow of the Beast II, the new game takes over where the other left off.

What's more, the hero also has the ability to interact with the people or creatures he encounters. A number of the characters are vital to the success of the mission, introducing a note of hesitancy to the slaughter. Shadow of the Beast II will be available soon—stay tuned for the review.

THREE GO SOLO

Despite the financial collapse of a number of software and hardware manufacturers this summer a few game developers are still brave enough to go it alone. System 3 have joined the likes of Core Development in a bid for freedom. System 3 officially went solo on American Independence day, a fact they were quick to use to their latest project Flimbo's Quest. Core Development should have the much-previewed Corporation and Torvak the Warrior ready for release at the Autumn Computer Entertainment Show in London.

TESTING TIME FOR PRINTERS

Melmar will be a new name to most Amiga owners, but they have a couple of new products that are of interest. First up is a double-sided, plated thru, full pro PCB which allows two operating systems to be selected from the keyboard (via two soldered



Shadow of the Beast II - Psygnosis promise a vast gameplay advance.



Corporation - due out soon.

connections) or from an extra switch. The second device is a parallel printer exerciser called Printest. This handy device allows you to test printers without having to plug them into a computer and caters for Epson compatible, Star and daisywheel printers. For more details on these products or Melmar's range of ham radio communications products, ring them on 091 2843028 (evenings), 091 2738811 Ext 22940 (daytime) or write to them at 2 Salters Court, Gosforth, Newcastle, Tyne and Wear NE3 5BH.



The Melmar printer tester runs independently of the computer.

ULLO ROLAND, GOT A NEW GAJIT?

Manchester based Music Software firm Gajits have just set up a deal with electronic music giants Roland. *CMpanion*, Gajits' librarian and editor program, is due be distributed by the instrument magnates themselves and will be available as part of their computer desktop music system.

CMpanion is compatible with assorted Roland eqiupment, including the CM-32L LA sound module, CM-32P sample playback module and the mega-successful MT-32 sound unit. CMpanion is available from any Roland dealer or can be obtained direct from Gaiits on 061 434 2768.

TOFWARE

It has come to our attention that some readers are having problems with a recent advertiser, Tofware International. The company apparently now has no address in the UK, so anybody needing to contact them should contact them at their Dutch address and phone number. Phone 010 31 1150 95898 or write to Lange Reksestraat 20, 4538 AG Ternevzen, Holland.

KICK OUT THE JAMS

A handy little box created by MSC Technologies will enable you to connect both a mouse and a joystick to the same port and switch between the wto at will – a good hassle-saving idea. The box is called JAMS, Joystick and Mouse Switch, and will cost a mere £12.99 including P&P from MSC, 81 Croxteth Drive, Rainford, Merseyside WA11 8LA.

RAINBIRD RELAUNCH BETRAYED

The relaunched Rainbird label's bid for the strategy games top spot continues apace with the release of *Betrayal*. Rainbird now will feature strategy orientated products.

Midwinter was the launch title for the concept which is being consolidated with Betrayal. Forthcoming brand-name products will include the likes of Universal Military Simulator II, Starlord and possibly even Midwinter II.

Betrayal puts the emphasis on pragmatism and realpolitik. As one of four barons in the middle ages the players compete for power in political, economic and military

Dick Tracy Tied Up

Madonna and Beatty are all set to hit the Amiga and cinemas simultaneously this autumn thanks to a new tie up between Titus, Nathan Software and Disney. Starting with the blockbusting licence Dick Tracy, Disney Software will be releasing nine titles before February including a game based on the forthcoming Spielberg movie Arachnophobia. There will also be educational/children's packages like Donald's Alphabet Chase and creativity packages which include The Animation Studio and Dick Tracy Print Kit.

...AND ANOTHER ONE IN THERE, PLEASE, AMOS

Following on from the initial success of AMOS, with 2000 users already having registered, Mandarin's astounding programming package is to be released with a bonus disk from the end of July.

AMOS Extras will contain extra tools and goodies to supplement the already extensive system. The disk includes the RAMOS routine, which will allow users to create stand-alone AMOS programs, Sprites 600, a library of ready-made animated sprites to use in your own games, an AMAL (AMOS Animation Language) Editor, a program for creating complex pull-down menus, an IFF Brush to Sprite converter, a scrolling text routine and a routine to convert Soundtracker and Sonix tunes to run in AMOS programs.

The disk also contains a bonus shoot-em-up game which takes place over a lunar backdrop. Any users that have already bought the system needn't worry, since all registered users will receive the Extras disk free of charge. Further information can be obtained by contacting Mandarin on 0625 859333.

circles. It's no more Mr Nice Guy because total power, complete with your own puppet King and Archbishop, is only an option for the devious, lying, cheating sorts.

Barons control villages and courtiers who must be protected if they're to be employed for your own advancement. Courtiers are prey though to the tender mercies of assassins, while villages – the

only source of food, money and soldiers – are prone to being attacked by other lords.

Designed by Floppy Electronics, the project has been in the planning stage since TelecomSoft controlled the Rainbird label. Now it's all but finished and the knives are being sharpened for some serious backstabbing come review time.



Electrocoin's Mr Do Run Run.

RUN RUN AWAY

If you're longing for the days when the arcades were arcades and the likes of *Donkey Kong* ruled the roost, then fret no more. *Mr Do! Run Run*, a conversion by Electrocoin, is almost with us. Based on the coin-op of a few years ago, Electrocoin feel that even today the game's natural playability will shine through and make it a winner.



Betrayal

Big Fun at the Big Show

PC Show no, CES yes as the year's biggest computer show returns.



Entry to the 1990 CES Show with AMIGA FORMAT

Conditions:1 Only one voucher per visitor. 2. Photocopies of this voucher will not be accepted.3. The organisers reserve the right to refuse entry.

The biggest date in the leisure computing calendar is normally the Personal Computer Show, held in September of every year. This year, though, the show undergoes a change of name as new organisers have taken over the running. It is now the Computer Entertainment Show.

This year's event promises to be bigger and more exciting than ever before, with all the major software houses putting in an appearance and Commodore expected to be displaying their CDTV to an expectant public. Other attractions will include the living room of the future, packed with the kind of electronic wizardry we'll all have in the future, and an international computer games competition.

Because the show will also be sponsoring Esther Rantzen's charity for children, Childline, many stars including herself and such pop stars Big Fun and Sonia will be there. The show is open to the public on Saturday and Sunday the 15th and 16th of September from 10.00am. The special voucher on this page will get you a reduction of 50p off the entrance charge.

STAY TUNED FOR THIS WORD

Those waiting for the latest version of Arnor's successful word processing package Protext can breathe a sigh of relief - Protext v5.0 is due for release this month. The new system retains all the functions of previous versions, but boasts a new, more flexible and easier mode of operation due to the inclusion of a more extensive system of pull-down menus. Arnor claim that this will allow users unfamiliar with the earlier versions to get the most out of the system with very little effort, allowing them to achieve maximum productivity with minimum confusion.

Protext v5.0 will be available at an introductory price of £125 until the end of September, when the price will be increased to the normal retail price of £149.95. Fortunately, existing Protext users can upgrade to the latest version at a considerably lower price. For more info. contact Arnor at 611 Lincoln Road, Peterborough, PE1 3HA, or telephone 0733 68909.

NEW OPERATING SYSTEM

If you fancy getting to grips with a new operating system then why not check out MINIX, which has just arrived on the Amiga in version 1.5. The system has over 180 utility commands, ANSI and POSIX C libraries and full source code for the system and utilities. MINIX is available from the Minix Centre on 0953 89345 and they also provide a range of application programs for use under MINIX and a support service which produces a quarterly magazine.

GREEN PAPER

The green revolution has made its way to listing paper and Action Computer Supplies are now selling three types of 'environmentally friendly' paper from the Standard Check Book Company. Checklist, Multilist and Safelist use 99% of the tree and use hydrogen peroxide for bleaching instead of chlorine. More from Action on 0800 333 333.

LOGICAL PURCHASE

Photofile, who provide a digitising service on the Amiga, have changed ownership and new owners Logic Software are expanding the services that it offers. New owner Richard McIntyre said "with the resources of a larger company I can now offer to expand the present digitising services of Photofile to include digitising of slides and, by arrangement, the digitising of 3-dimensional objects. We will, of course, present the finished digitising on slide, disk or videotape as required."

He also added that "we have been customers of Photofile ourselves and we have no intention of changing the basic structure and service offered." Photofile's new phone number is 0865 742182 but its postal address remains the same — PO BOX 49, North PDO, Nottingham NG5 6SR.





MAD PROFESSOR MARIARTI

Closing down science labs doesn't sound fun, but with crackpot inventor Mad Professor Mariarti it's a different story. He's got a little problemette with five of his labs, dealing with everything from genetic science to rocket technology – the town council wants them shut, now!

In this platform arcade romp the enemies are of the Prof's own creation. He's attacked by huge disks, killer ROM chips and the deadly ribbon cables! The third game for **Krisalis**, this classic format is given an extra shot in the arm with puzzle elements, a shootem-up and ultra cute graphics. Get those white coats ready, the Prof should with us soon.

WEB OF TERROR
As if in response to dear old Channel 4's Creature Features TV series, Impressions present Web of Terror. A gigantic

COMING ATTRACTIONS

We proudly present the hot news of all the new releases you can expect to see arriving this month...

spider has appeared and is eating a space liner full of people. A lone space ranger is engagde to go to their rescue and that's where this arcade quest begins.

Heading into the web, the ranger has to rescue passengers four at a time. 125 levels in total of arachnid mayhem are promised, as you try to manage limited fuel stocks, avoid the spider and locate the nearest transporter. The Web should weave its way to your Amiga in the next few weeks.

SPEEDBALL II

Futuristic ultra-violence is set to stomp the games scene once again, courtesy of Bros – the Bitmap Bros. This sequel, Speedball II, features: more weapons, warp chutes, ramps and target squares and a larger playing area than its rather spiffing forerunner.

What's more, in this forthcoming **Imageworks** extravaganza you get the chance to manage the team and even trade players between matches. That's if you've any players who aren't in the hospital or morgue after the previous bash. The new *Speedball* season kicks off this Autumn.

STREET HOCKEY
Gonzo Games' next big
venture is the streetwise
world of Street Hockey, based on
the popular sport and officially
sponsored by the British Association. It features 3D viewpoints,
multi-directional scrolling and even®



real-time bi-directional serial interfacing between different machines - PC or ST to Amiga!

Based in New York, your team first has to cross the car-riddled streets in classic Frogger mode to reach matches at sites that include Little Italy, Chinatown and the Rockefeller Centre. Street Hockey is expected to hit the road at the end of August.

UNREAL

The planet Unreal was created by Fagor. He took with him four life-giving eggs and two guardians to preserve the balance between good and evil. Due a mishap with a comet on arrival all planetary control was lost, leaving the two guardians slogging it out for supremacy.

As a native of Unreal you must fight against the evil guardian. aided and abetted by a friendly dragon. You can even pilot said dragon in a 3D flight sequence. UbiSoft have no news on the release dates as yet, but we shouldn't have to wait too long before things get really Unreal.

CORPORATION Core Design - of Rick Dangerous fame - have nearly completed their first solo project, entitled Corporation. Set in the future, the game gives you the aim of infiltrating a research lab and bringing back one of the outrageous genetic projects the Corporation is developing.

A 3D adventure, it's all the stunning because the more project's protected by horrific genetic mutants and huge cyborgs. Which means there's a lots of ducking and diving as you roam the Corp's HQ. As you sneak around there's lots of kit including gas masks, explosives, body armour and all those bits 'n' pieces spies usually find lying about to collect. The Universal Cybernetics Corporation should be doing business within the next few months.

OPERATION STEALTH His name's Glames, John

Glames, and he'll shortly be embarking on Operation Stealth, with help from US Gold. In this James Bond-style epic, the man with the plan has to fend off piranha, evil megalomaniacs and beautiful women. Life's a bitch and then suddenly it isn't.

OPERATION HARRIER Operation Harrier is the second game this month from US Gold. It appears to involve flying around a bit, bombing things and getting shot down a lot. The plot will no doubt become clear as the game hits the skies later this month.

UN SQUADRON More US Gold aerial antics are coming with the UN Squadron. Lots of hardcore blasting action looks likely with the boys in the pale blue berets. Produced by Tiertex, the Goldies' arcade specialists, UN Squadron takes off this Autumn.

FLIMBO'S QUEST

More cutesy action, this time from System 3. Their first independent title, this one features some darned impressive graphics and parallax scrolling. Young Flimbo has to run about a fairyland-style world in a bid to rescue a damsel in distress from the clutches of wicked, deranged professors in a cartoon adventure game.

BETRAYAL New from Rainbird is Betrayal, a 'devilish god game' in which the plot sets you the task of seizing power in a medieval fiefdom using a combination of economic, political and military nastiness. 'Wanna-be-Machiavellies' will only have to wait a matter of weeks now until they get a chance to be really nasty to

family and friends alike.

ARWOOD YOUR FIRST CHOICE FOR AMIGA

HARWOODS LEGENDARY Amiga POWERPLAY

ALL OUR AMIGA POWERPLAY PACKS INCLUDE AN AMIGA A500 WITH...

- 512K RAM
 1Mb Disk Drive Mouse

 3 Operation Manuals

 Workbench 1.3
- 4096 Colours

- Built-in Speech
- Multi-Taskina

System Disks Kickstart 1.3 Built-in

Synthesis All Connecting Cables
ALL OUR PRICES INCLUDE VAT AND STANDARD POSTAL DELIVERY SERVICE

Plus you can now choose either Flight of Fantasy
or Batman Software
to go with Packs 1,2 & 3
Absolutely Free!

AND WITH PACKS 1,2,3 & 5 YOU GET AN EXTRA... BRILLIANT BONUS BUNDLE

ONLY FROM GORDON HARWOOD COMPUTERS!!!

- Trivial Pursuit

- Voyager Archipelagos Deluxe Paint II

(Packs 1&5 ONLY)

You get a Great Mystery Software Title FREE too!!!

Pack

Amiga POWERPLAY

PACK 1

PACK 1

PACN

Games Pack

Probably the Best Games Pack around. You won't need to buy anything else for ages and you'll be able to start to use your Amiga the moment it's out of the box!

PACK Amiga A500 + Bonus Bundle

Or spread the cost with our Finance Facilities

Amiga POWERPLAY

PACK 2

The Games 'Plus' Pack

Containing the super Powerplay Pack 1 & a Philips CM 8833 PACK 2 Stereo Colour Monitor plus a Free Tailored Monitor Dust Cover! PACK 2

See those Games even more clearly...

Amiga A500 + Bonus Bundle +CBM 1084S Colour Monitor

Amiga POWERPLAY

PACK 3

The 'Extra'
Plus Pack
Take our 'Powerplay'
Pack 2 and add Star's fantastic LC10 Colour PACK 3 Printer to give you the Ultimate Colour home 24(4)/84 entertainment computer

(If you prefer another printer simply deduct £209.95 and add the price of the alternative you require, choose from our lists)

Amiga A500 + Bonus Bundle +10845 + Star LC10 Printer

Amiga POWERPLAY

'Powerpro' PACIC 4 Amiga A500, Star LC10

Colour Printer, CM8833 Stereo Colour Monitor, 'Protext' Version 4.2 Word Processor, 'Superbase II' Database, 'Maxiplan 500' Spreadsheet, Tutorial Disk, PACK 4 PACK 4

Mouse Mat, Ten 3.5" Blank PACK 4

Disks with Library Case, Three Great Quality Dust Covers Tailored for Amiga, Monitor and Star Printer!

and Deluxe Paint II' +



HARWOODS COMPLETE STUDENTS PACK

AMIGA A500 PLUS...Publishers Choice (DTP-Includes Kindwords Vers. 2), Midi-Master I/Face, Dr. T's Midi Rec. Studio, BBC Basic Emulator, Maxiplan 500 S/Sheet, Superbase Personal D/Base, Amiga Logo, F18 Interceptor, Ten Blank 3.5" Disks with Disk Wallet,

PLUS OUR 'BRILLIANT PACK 5 **BONUS BUNDLE' FREE!**

REMEMBER TO CHOOSE EITHER YOUR FREE 'BATMAN' OR FREE 'FLIGHT OF FANTASY' SOFTWARE COLLECTION A OR B WHEN YOU BUY YOUR HARWOODS POWERPLAY PACK 1, 2 OR 3

BATMAN THE MOVIE Collection A

Batman the Movie **New Zealand Story** F18 Interceptor



FLIGHT OF FANTASY Coffection B

Escape from the Planet of the Robot Monster Rainbow Island F29 Retaliator

HARWOODS THE NAME YOU CAN TRUST



FINANCE FACILITIES

Gordon Harwood Computers offer facilities to pay by our budget account scheme for virtually any order of £100 or more. APR 36.8% (Variable). Credit sale terms are available to most adults of eighteen years or over, subject to status. Simply phone or write and we will send written details along with an application form. Applications are required in advance and are available to full time U.K. mainland residents only.

Written quotations available on request.

Credit sale terms with or without a deposit, can be tailored to suit your needs.

ORDERING MADE EASY - COMPARE OUR SERVICE



ORDER BY PHONE: Phone our Order Holline with your Mastercard, Access, Visa or Lombard Charge Card quoting number & expiry date.

ORDER BY POST: Make cheques, bankers-building society drafts or postal orders payable to GORDON HAKWOOD COMPUTERS. (Personal or business cheques take 7 days to clear from day of receipt before your order is despatched)
Please send Name, Address, and most importantly if possible, a Daytime Telephone Number along with your order requirements.

TO PAY BY GIRO TRANSFER: at your owb bank, simply phone us for details (Transfers normally lake 3-5 working days).

FREE POSTAL DELIVERY: Goods in UK Mainland (5-7 day delivery).

OR COURTER SERYICE. Add 55 per major item for next working day delivery, UK Mainland most regions.

(Goods normally despatched on day of ordering or payment clearance)

EXPORT ORDERS: Most items are available at TAX FREE PRICES to non UK residents when visiting us or for export shipment. Please contact us for ordering information.

REMEMBER AFTER YOU'VE BOUGHT FROM HARWOODS, WE'LL STILL BE HERE..

TECHNICAL SUPPORT: You will be given our Exclusive Technical Support Phone Number to call should you require any help or advice on any aspect of the system you have purchased.

12 MONTH WARRANTY: New items proving faulty within 30 days of purchase are replaced with NEW UNITS unless otherwise stated. For the whole guarantee period, all warranty service will be completely RRE OF CHARGE and a FAST turnaround is GUARANTEED by our OWN ENGINEERS!

COLECTION FACILITY: Any computer, monitor or printer requiring warranty service can be collected from your home RRE OF CHARGE during the guarantee period (UK Mainland only)

FULL TESTING PROCEDURE: All computers are lested prior to despatch, and all items are supplied with mains plug and leads as required – just connect up and use straight away.



MONITORS

PHILIPS CM 8833 STEREO
Full 14" Stereo High Resolution Colour Monitor

SCART Euro-connector fitted as standard

- RGB/AI, TTL, Comp. Video & stereo audio inputs
 Can also be used as a TV with tuner or VCR
 Features fold down tilt-stand Twin Speakers

- FREE lead for computer of your choice
- FREE 12 Month on site service warranty.

COMMODORE 1084 S

Full 14" Stereo High Resolution Colour Monitor

- RGB/AI, TTL, Composite Video & Audio Inputs Can also be used as a TV with

- a tuner or VCR
 Twin Speakers
 Supplied with cables for
 A500, CGA PC, C16-64-128

SUMMER CLEARANCE SALE
PRODUCTS AT LESS THAN ADVERTISED PRICES!!!
HONE NOW for deatails of our EX-DEMO and REFURBISHED STOCI

SAVE £££'s...SAVE £££'s...SAVE £££'s

COMMODORE

ASOT RAM PAC

GENUINE CBM ram pack with real time battery backed clock. This add-on DOES NOT invalidate Commodore's warranty.

QUALITY ACCESSORIES

10 GENUINE COMMODORE 3.5" BLANK DISKS £9.95 QUALITY CERTIFIED 3.5" BULK DISKS (sup

Ten, with library case

Ten, uncased Eighty, uncased Hundred, uncased

Eighty with LOCKABLE storage case

PHONE FOR QUANTITY

DISCOUNTS!

£19.95

HARD DRIVES

COMMODORE A590 20Mb HARD DISK DRIVE FOR AMIGA A500, WITH FREE 0.5 Mb MEMORY Commodore's own hard drive for the A500 Autoboal with Kicksturl 1.3 Sockets for up to 2Mb RAM expansion DNA access Leternal SCSI port SUPPLIED WITH A FREE. 0.5Mb MEMORY EXPANSION

A590 HARD DISK (As Above) WITH 2Mb MEMORY Expansion fitted and ready to use straight away

NEW LOW PRICE ONLY...£499.00₺

40Mb VORTEX HARD DRIVE FOR BOTH AMIGA A500 AND AMIGA A1000 For both A500 and A1000 as supplied Autoboots on ANY Amiga

- GREAT VALUE AT ONLY...£499.00

FLOPPY DRIVES

EXTERNAL FLOPPY DISK DR

The drives listed below have the following features...
Enable/Disable switch
Throughport
LED Acress light, super quiet
Suitable for A500, A1000, A2000

CUMANA CAX 354 3.5" SECOND DRIVE

CUMANA CAX 1000S 5.25" SECOND DRIVE

Amiga DOS and MS DOS compatible
SAVE MORE THAN EVER

HARWOODS SUPERSLIM 3.5" SECOND DRIVE

Extra storage and great value too!

'SUPERSLIM PRICE' ONLY...£64.95

Amiga

MUSIC X -FULL VERSION-SOFTWARE

Including...'It Came from the Desert' and FREE... Mystery Major Amiga software title and Utility Software Disable Disk.

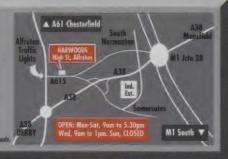
FASTORDER HOTLINE-0773 836781



VISIT OUR SHOWROOM
Please pay us a visit where our full range of advertised products,
AND MORE, is on sale. Come and see for yourself amazing Amigas
and a whole host of peripherals, software and accessories.

REMEMBER, WE ARE NOT JUST ANOTHER MAIL ORDER COMPANY

During Aug/Sept we'll be moving to our new purpose built showroom and warehouse facility in Alfreton. We'll then be able to affer an even more extensive service, but, don't worry if you need to contact us quickly our phone numbers will stay the same. Watch our future ads. All listed prices are what YOU PAI, and there are NO HIDDEN EXTRASI YAI and postage are included and prices are correct at time of painty or pass (Peak deaths may vary from time to time). Offers an subject to evaluability and are corrently advertised prices and are NOT supplied on a trial I. S. O. F.



All printers in our range are Dot-Matrix and include the following features...
Standard Centronics parallel port for direct connection to Amiga, PC's, ST etc. and come with...FREE CONNECTOR CABLES!

Our most popular Mono Dot-Matrix printer and at a super low price

- Multiple fant aptions from front panel Excellent paper handling Simultaneous, continuous and single sheet stationery 240 x 240 dpi Graphics

Brand new superfast MkII version of the ever popular LC10 printer.

- Colour version of the LC10
 Same font & paper handling as LC10/LC10II
 Allows full colour dumps from Amiga
 Superb text quality
 240 x 240 dpi Graphics
 Can use black LC10 ribbons
 Our most popular colour printer!

- 24 Pin version of the Star LC Series with
 Exceptional letter print quality
 360 x 360 dpi Graphics
 Additional font cartridges available
 B resident fonts

240/80 cps Very fast LQ 24Pin Colour Printer

- ry tost LU 24th Colour Printer
 Exceptional print quality
 4 x 48Pin super letter quality fonts
 24 x 24Pin near letter quality fonts
 Huge 27K buffer expandable to 187K
 360 x 360 dpi Colour Graphics
 Our best colour printer
 12mths on site warranty
 (UK Mainland)

£479.95

- 300 DPI, 2Mb. Memory upgradable to 5Mb.
 Emulations include: HP Series II, Epson EX800,
 18M Proprinter and Diablo 630
 Serial/Parallel printer interface built-in
 Includes 12mths on site warranty (UK Mainland)
 Every desktop publishers dream

- Most competitive 24 Pin Colour Printer available Today!!

 Push and pull tractor built-in

 Additional bottom feed for labels/multi-part stationery

 360 x 360 dpi Colour Graphics

 2Year Citizen warranty (UK Mainland)

N COLOUR - 160/40cps

- CITIZEN SWIFT 9PIN COLOUR 160/40cps

 New super high spec 9Pin colour printer

 8K Buffer

 4 Fonts

 Push and pull tractor built-in

 Additional bottom feed for labels/multi part stationery

 240 x 240 dpi Colour Graphics

 Best text quality in our 9Pin range

- Ortizen 1200
 Very reliable low cost printer
 Interchangeable interfaces for Centronics RS 232
 or Serial type for CBM 64 etc
 2 Year Citizen warranty (UK Mainland)

Characters Per Second speeds quoted are Draft/LQ at 10cpi
A FULL RANGE OF PRINTER RIBBONS ALWAYS AVAILABLE

We are proud to announce that Star have appointed Gordon Harwood Computers as both a Star Corporate Preferred Reseller and Star Gold Dealer in recognition of our commitment to their products and the levels of

MAKE HARWOODS YOUR FIRST CHOICE FOR STAR PRINTERS

GORDON

Computers

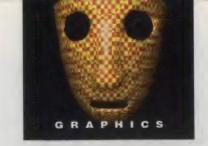
GORDON HARWOOD COMPUTERS DEPTAMF/B10, 69-71 HIGH STREET ALFRETON, DERBYSHIRE, DES 7DP TEL:0773 836781 FAX:0773 831040

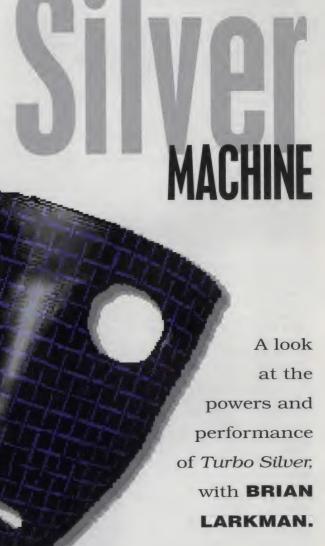


Special Effects 2

Ithough it has been available in some guise or other for more than two years Impulse's 3D modelling, rendering and animation system, *Turbo Silver*, has remained fairly unknown in Britain Now there is revived interest in the program, thanks mainly to Intelligent Memory of Frankfurt and The Software Business of Huntingdon, Berkshire, who are marketing it in Europe and Britain respectively.

The main reason that *Silver* is worth all this effort is that it has quite remarkable surface mapping capabilities – as we saw last month. As we promised you, here is a full review of all the bits we have come to terms with so far – object editing and rendering. The Terrain Module and the complexities of animation will have to wait.





The Animation Editor

When you start the program you are first presented with the animation editor. Centre screen is a horizontal strip of film – 8 frames across – plus an extra frame near the bottom. On either side of this extra frame are sliders – the left slider determines which 8 frames (from 999) are displayed, the right sets the frame delay. At the top is a normal menu bar giving control of all rendering and animation functions.

Each frame represents one image rendered according to the screen resolution and rendering mode selected on the menus, plus the scene set up in the object editor.

Each scene is called a 'cell'. These can be unique for each frame, or reproduced a number of times. It is this ability to cut individual cells – or sequences of cells – and paste them in any order anywhere on the 999 frames of the filmstrip that makes this such a powerful animation editor.

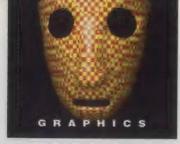
Two methods of duplicating cells are provided – 'copy, cut and paste' and 'source and target'. 'Copying' produces an exact clone on 'pasting' and the new cell will have the same cell number regardless of which frame it is in and how many copies there are. Each clone of a particular cell is an identical copy, so changing the clone changes the original and vice-versa.

* After several weeks of use there is little doubt that the images produced by *Turbo Silver* are wonderful...*

Using source and target' also produces an exact copy of the source in the target cell, but the target has a new number and can be changed without affecting the original. This can be very useful when developing animations and experimenting with scenes and complex objects.

Unlike most modelling systems Silver provides an Undo, but this only operates on the last action. If you want to do any real experimenting it is often necessary to carry out several manipulations of an object, only the last of which is undoable.

One way out of this is to save a copy of the object to disk before the experiment, but a better solution is to



always work with a 'source/target' duplicate cell rather than the original. As work progresses eight or ten or even more cells may be present on the film strip, each representing a different stage in the development of an object or scene.

All of these are available for examination and re-use so that ideas can be developed along several parallel lines. One thing that would make this process much easier would be the ability to name each cell – or better, attach a comment to it.

Once the final version is arrived at, that cell can be saved and the others discarded or archived. In a similar way, multiple cells could also be used as 'layers' to assist in the construction of a complex object. Each part of the object is built in a separate cell or

"Objects can be constructed and edited, texture maps applied, scenes assembled, animation paths set, light sources positioned and camera angles determined "

layer using the coordinates box to ensure accurate registration. When they are all finally complete, the Join command can be used to superimpose the parts.

The Object Editor

Double-click on any frame and the object editor for that cell or image is displayed. This is where most of the serious work takes place. Here objects can be constructed and edited, texture maps applied, scenes assembled, animation paths set, light sources positioned and camera angles determined.

Initially, just a small circle with a line pointing from its centre is shown, representing the camera, viewed from the front. Right side and top views can also be selected from the keyboard. All functions are controlled from the menus, function keys, and other programable 'hot-keys'.

Before any other form of object or light source can be constructed an axis must be provided for it. The axis is a 'hot-spot' that is used to select



TUTORIAL ONE

TEXTURE MAPPING AND RENDERING

The range of rendering possibilities in *Turbo Silver* is almost endless. Reflectivity and transparency can be applied to almost any object, often at the same time as a texture or brush-wrap, and can be varied almost infinitely. Coded textures and mapped brushes can also be wrapped onto anything in a wide range of ways, even both at once, so an object could be semi-transparent, wrapped in an IFF brush and mapped with a coded texture!

With so many variables, learning how to

create a particular texture mapped and rendered effect is to some extent a matter of trial and error, depending on the nature of the scene and objects, the lighting, and camera position. Undoubtedly, Silver is a program that must be learned the hard way. So rather than a detailed, step-by-step tutorial it seems more useful to give a series of tips on how to set up the scene to get the most out of the Turbo Silver environment.

In the spirit of experimentation that is so much a part of using Silver, there is also a description of the process involved in rendering wood effects using the Brick Texture, by modifying its parameters.

Checks

In the current version of Silver only two built-in textures are available – Amiga Format will be chasing up the other five or six that are available in America. For the meantime, the easiest and most straightforward effect is Check. This can be applied to any object, but like all of Silver's coded textures it is a 3D effect. In other words, it is not wrapped around an object like a brush, but penetrates into it.

The chequered masks above illustrate the effect very well. Imagine a block of Plasticine built up from alternate red and yellow cubes in all three dimensions. Now visualise that the

masks have been carved from this multicoloured block. With this in mind the apparent inconsistencies begin to make sense and can be used to make some unusual effects. To get regular looking checks use flat objects and multiples of 32 for Check Size in the Parameters requester; other numbers produce much more complex patterns. If you really wanted the checks to wrap round the object, not through it, then use a wrapped IFF chequered brush.



Bricks and Wood

The Brick Texture provided is also a penetrating 3D pattern and can be transformed by varying its parameters. The series of Mask renders above show the results of changing the colours and x, y, and z dimensions, and the 'mortar' thickness. The first attempt used the following parameters: X Size=40, Y and Z Size=20, Mortar Size=2. Shifts all set to 20 and Offsets to 0. The yellow version resulted from X=10, Y&Z=2, Mortar=0.3. Immediately, the

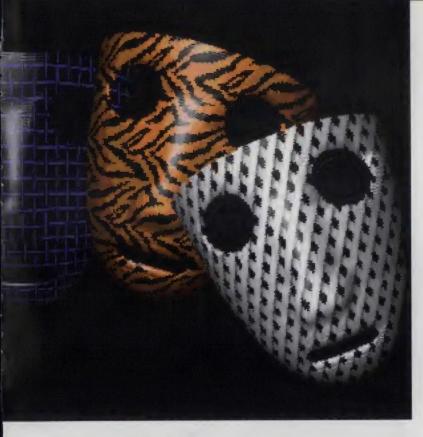
brick pattern broke up into this reptilian-looking surface.

Changing X to 90, Y and Z to 3, and mortar to 1 produced Brick-Wood, the first example looking like wood-grain. From this point the parameters were deliberately varied to enhance the wood effect. Equally, the scaly yellow version could have been varied to develop a scaly surface. The last three attempts, Silver Birch, Pale Wood and Red-Brown, use variations of colour to help the effect. Pale Wood has X&Y=3 and Z=90 to make the grain vertical.

Surface Wraps

The Blue Grid, Tiger, Trellis and Gold-Silvermoon pictures all use IFF brushes to create their effects. In each case the Attributes requestor was set in the same way so that the result is dependent just on the IFF brush used. Blending was set to 10 (values above 25 break-up the original image), Specular to 200 and Hardness to 6. Shaded, Smooth, Normal and IFF Brush were all selected.

To ensure that the brush covered the mask, the original axis used for the brush was scaled in the Transformations Requester so that the object just fitted in all three dimensions. Small brushes stretched very large show severe pixelation effects, but Silver manages to blend these so that they usually still look convincing.



By far the most unique capability of *Turbo Silver* is Surface Mapping. Other programs have this ability to some degree, but only *Silver* has such fine control 99

the object ready for any functions, transformations or attributes to be applied. (The only exceptions to this rule are the primitive and custom objects that arrive with a built-in axis.)

It is the use of this 'hot-spot', and particularly the coded colours that objects, points, edges and faces turn to when they are 'picked', 'selected' and 'marked', that causes the most problems with *Turbo Silver*. The various 'states' of objects and their parts, and the colours that go with them, are unnecessarily complicated, requiring constant reference to the manual. Eventually the complex logic of the rules does begin to make sense, but it certainly couldn't be called a user-friendly system.

Objects are constructed with points, edges and triangular faces. These can be added individually if you want to build an object from scratch,

but are of most use for constructing profiles ready for extruding or spinning, and for editing ready-made 'custom' objects. A sphere, torus (or doughnut shape), cone, disk, tube and extrude (or solid column) are all available in 'off-the-shelf' form, whose size and number of divisions can be selected in advance.

These custom objects are automatically built from points and edges, extruded or spun, and can be edited in the normal way. A sphere and a flat rectangular surface are also provided in 'primitive' form. They can be re-sized and given attributes like the custom objects, but cannot be edited. The advantage of primitives is that they render very quickly.

Two other object types can be added to the scene – ground and stencil. Ground, as its name implies, is a ground-plane, and several can be

This mask was chosen as the basic object on which to test out the surface mapping facilities of *Turbo Silver*. A description of how the mask itself was constructed follows on the next page, in Tutorial Two.

FAR LEFT: These three masks all make use of the standard Check texture that comes with Silver, but used in varying sizes.

LEFT: Brick and Wood effects are all achieved with subtle variations in the standard Brick texture.

ABOVE: These masks are all a product of wrapping IFF brushes onto the surface. added to the scene. They stretch in all directions to the horizon and can only be moved in the vertical (Z) axis.

Stencil is a 2D object created from a two-colour bitmap. When rendered in *Turbo Silver* the original background colour of the bitmap is transparent, the foreground colour behaves as a normal object that can be animated, and transformed. Both the Ground and Stencils can be assigned brushes, textures and other attributes.

The tutorial describes how the object editor tools and functions were applied to the construction of the object in the shape of a mask, used for the illustrations on these pages. The tools provided were adequate for this task, but the job would have been made a lot easier if certain specialised commands like mirror and magnet had been available.

The Render Engine

By far the most unique capability of *Turbo Silver* is Surface Mapping. Several other programs have this ability to some degree, but only *Silver* has such fine control: over lighting and specular reflections, over the dithering of colours, and over the wrapping of complex objects with the textures. The effects are superb. (For a full description of Surface Mapping on the Amiga see *Amiga Format* 13.)

The surface effects applied to all objects are controlled by the Attributes requestor and the Brush and Texture menus in the Object Editor. The accompanying tutorial, on the opposite page, describes the use of these facilities in detail.

The more general control over rendering and the 'look' of an image is handled in the Animation Editor. The screen display and resolution are set by menu commands before a new project is initiated.

Display modes available include HAM, lo-res, hi-res, interlace and non-interlace, normal and overscan, 12-bit and 24-bit RGB. It can be a little inconvienient trying out a picture in several different modes as this involves saving the cell, closing the project, starting a new one, loading the cell and rendering it.

The rendering options include wire-frame, solid model, and full trace. Full ray-tracing is the best option, rendering texture maps, reflective surfaces, transparency, shadows and specular highlights with amazing realism, but is numbingly slow unless you have some sort of accelerator card. The other options sacrifice some of the image quality to increase the rendering speed. Wireframe is very quick, but... it's just wire-frame. Solid model provides suprisingly good results very quickly, even rendering texture maps that look much like the full trace ones (though without reflectivity or shadow effects).



Limited offer only
Available only while stocks last,
two incredible PHOTON PAINT software specials! PHOTON PAINT I (Limited to first 15 customers only)

ONLY £10.95! PHOTON PAINT II (Limited to first 35 custome ONLY £39.95! Dynamic Database Dear SUPERBASE PERSONAL Fully Relational WIMP based Database (RRP of £59.95) ONLY £15.00

Please note at Merlin we stock ONLY...
GENUINE UK SPEC EQUIPMENT

COMMODORE 1084S 14" Stereo High Res. Colour **COMMODORE 1084P** Mono Sound Version of 1084S

PHILIPS CM8833 14" Medium Res. Colour Twin speakers, Green screen switch, with tliting stand.

£249

PRONE AND CHECK AVAILABILITY AND LATEST PRICES ON

CBM MONITORS!

FREE...12 Months on site Maintenance with CM8833's £14.95

PHILIPS Tilt/Swivel Stand

VORTEX 40Mb Hard Disk £499 CUMANA CAX 354 1 MEG. 3.5" Single CUMANA CAX 1000

1 Meg. 5.25" Single

£86 £129 NEW! |

STAR LC 10 Mono £169 Star STAR LC 10 Colour STAR LC 24 10 £209 £249 STAR LC 10 MkII £185

ACCES

10 - COMMODORE 3.5" DISKS £9.95 **40 Capacity DISK STORAGE** £6.95 **80 Capacity** BOXES. £8.95 **MOUSE MATS** £4.95 AMIGA KEYBOARD DUST COVERS£5.95 STAR PRINTER DUST COVERS £5.95 CM 8833 DUST COVERS £5.95

AMIGA Class of the 90's Pack £524 AMIGA Comp. Pack* + CM8833 £608
AMIGA Comp. Pack* + CM8833 £809
+Star LC10 Colour Printer

Bither Flight of Fair Actions Printer
Bither Flight of Fair Actions Printer

ESCAPE REALITY WITH THE ALL NEW FLIGHT OF FANTASY' GAMES PACK!

Amiga A500 with Modulator, Mouse, 1 Meg Internal Disk Drive, 512KRAM, All Connecting Leads, Kickstart 1.3, 4096 Colours, Built-in Speech Synthesis, Multi Tasking, Workbench 1.3 System Disk, & Operation Manuals.

Plus... FOUR GREAT SOFTWARE TITLES F29 Retaliator, Rainbow Island Escape from the Planet of the Robot Monsters, Deluxe Paint I



Amiga A500 with Modulator, Mouse, 1 Meg Amiga ADUD With Modulator, Mouse, I Meg Internal Disk Drive, 512KRAM, All Connecting Leads, Kickstart 1.3, 4096 Colours, Built-in Speech Synthesis, Multi Tasking, Workbench 1.3 System Disk, & Operation Manuals.

Plus... FOUR GREAT SOFTWARE TITLES Batman, F18 Interceptor, New Zealand Story and Deluxe Paint II



MOUSE MAT, DUST COVER, LOCKABLE 80 CAPACITY DISK STORAGE BOX **10 BLANK DISKS & JOYSTICK**



COMMODORE BARREL BAG & DISKETTE HOLDER, + COMMODORE KEYRING.

> from the three detailed here

for Only...



COMMODORE - QUARTZ ANALOGUE SPORTS WATCH, MUG, KEYRING, BALLPEN AND SOLAR POWERED CALCULATOR

CHOOSE AN AMIGA FLIGHT OF FANTASY OR BATMAN PACK (As listed above)...

(Individual Sorcerors Packs [ie without the A500] are available to purchase depending on our stocks, phone for prices and further details quoting the relevant SC number)

Your pick of any 1 Sorcerors Pack

Inclusive of VAT and Postage!

ALL OUR PRICES INCLUDE V.A.T. AND POSTAGE (UK Mainland)

Whilst every effort is made to ensure that the information shown on our advertisements is correct you should ALWAYS confirm any Offers, Prices, Availability etc. prior to placing orders. Because our advertising is booked so far in advance, Merlin reserve the right to alter equipment specifications, withdraw any product/offer or update prices (either up OR down), without prior notice. ALWAYS CHECK DETAILS PRIOR TO ORDER.

Merlin will NOT supply anything that has been subject to change without the customers prior permission.

ORDERING: Just phone our 24 hour order line using your Access/Visa card, OR, send a cheque/postal order with your requirement details.

(Cheques need clearance prior to despatch)

DELIVERY: You choose either, by post at no extra cost, or simply add $\mathfrak L \mathfrak D$ per large item for next working day courier service. (UK Mainland)

WARRANTY: Goods that prove faulty within 30 days will be exchanged for NEW After 30 days, & within 12 months, faults repaired at our expense.



EXPRESS LIMIT

DEPT. AMF/M6, UNIT D9, THE ROPEWALK INDUSTRIAL CENTRE STATION ROAD, ILKESTON, DERBYSHIRE. DE7 5HX TELEPHONE: 0602 441442 FAX: 0602 440141

VALUE, THAT'S T MAGIC 0 F

TUTORIAL TWO

SILVER MASK MODELLING

The mask used to produce the illustrations was modelled using most of the Object Editor functions:

- 1 From the Front view, add axis.
- 2 Select Add Point and create Mask profile. Use about 30 points (depending on your available memory). A single line is preferable to a crosssectional area. When making the eye and mouth-holes later, a double skin would have presented problems.
- 3 Connect the points with Add Edge.
- 4 Select Pick Object, then select the Mold command.

5 In the requestor, set:

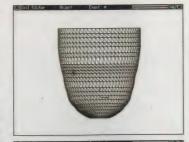
a) The number of sections. Depending on the memory you have available this should be quite high preferably the same as the number of points chosen for the profile. This gives you an approximately square grid for further manipulations.

b) the number of degrees. In this example 180 degrees were chosen. 120 degrees would probably have been better, though, then the mask would need rotating 30 degrees to be facing front.

6 Click on the Sweep button. Selecting Spin would have held the end points and created a total mess! I know - I tried.

7 The blank mask shape is shown above. This can be used as the basis of a number of masks with different features, so duplicate this cell to frame 2 to continue the work. Repeat at each stage.

- 8 Quit the Object Editor.
- 9 Ensure that frame 001 is selected and make it the Source (Cells Menu).
- 10 Select frame 002 and make it the Target (Cells Menu).
- 11 Enter Cell 002
- 12 Now model the eyes and mouth (possibly create a new cell for each).
- 13 The next step is to select the mask by clicking its axis.
- 14 Use Pick Point and Multi Mode (hold down the left shift key) to choose an approximate circle of points. These will all be deleted so the size of the eye-hole is determined by the points outside this circle. The centre of the circle should be approximately half-way from the centre line of the mask to its edge. Still in Multi Mode select all of the points within the circle and Delete them (Edit Menu).
- 15 Because all of the diagonal edges run in the same general direction it may be necessary to Add some Edges across diagonals the opposite





way to make the edge of the hole smooth. To Add Edges that are not adjacent you must come out of Add mode by Picking the Object, then returning to Add Edge. Remember to Add Face over the new faces: unlike Sculpt, making a triangular set of edges does not make a face so these triangles will not render.

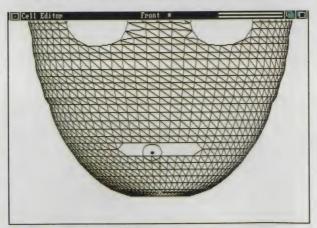
16 Use Pick Point to select and move points on the circumference of the new eye-hole to make it more circular (or oval etc. depending on your requirements). Select the point once to Pick it and again to Mark it for moving (it turns red when Picked just like noses - then the whole object turns green when it is Marked.) The The various stages that went into the construction of the wire-frame mask on which all the surface mappings were performed. The mask shape is built in Turbo Silver's Object Editor.

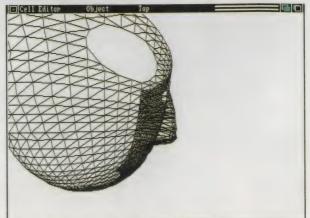
TOP LEFT: The basic original basket-shape.

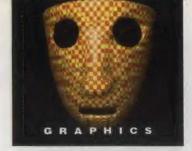
ABOVE LEFT: With the holes for the eyes added. This is done in the Cell Editor.

BELOW: The mouthhole is also added in the Cell Editor.

BOTTOM: Shaping the nose is slightly more simple, involving changing the axis and rotating the points.







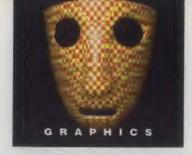
next point that you click is the destination for the Marked point. Zoom in to get fine detail.

The process described above is the one used for all operations involving cutting into an Object and distorting its points, edges and faces. It is a bit labour intensive but you will soon get the hang of it, developing other strategies to perform particular tasks.

For example, pulling out the nose could be done in exactly the same way, but a simpler technique is to move the axis and rotate the points that make up the nose.

- 17 Use Coordinates to check the exact position of the bridge of the nose on the x, y, and z axes. This is the position that the nose will be rotated out from.
- 18 Select the Mask object (it turns dark blue), enter Pick Face mode and pick one face (any face will do).
- Press F6 to activate the Transformation requester and type in the coordinates of the bridge of the nose to the Translate settings. Close the requester and the axis moves to those coordinates. (Don't ask me why, but it works!)
- 20 Enter Pick Point mode and, holding down the left shift for multi-mode, Pick all of the points that make up the nose region, working down from the bridge. Remember that the very effective smoothing algorithm in Silver will make even very square-looking lumps look rounded.
- 21 Activate the Transformation requester and type in -20 on the x axis of the Rotate settings. This will rotate the nose out of the mask towards you around the axis at the bridge.
- 22 If you want the mask to look as if it has thickness, Extrude the eye-hole and mouth-hole points back into the face for the depth.
- 23 Pick the Mask Object and then enter Pick Point.
- 24 Pick the points around mouth and eyes in Multi-mode (left shift).
- 25 Select Mold which is to be found on the Settings Menu.
- 26 In the Mold Requester change the number of sections to 1 and the depth to that required. (In the mask 10 was used but 30 would have been better.)
- 27 Click on the close gadget and the thickness is extruded.

You now have a mask! To render the mask with surface effects see the Rendering Tutorial.



To speed up test renderings in full trace mode, a rectangular zone of any size can be selected anywhere on the screen. Only this zone is rendered so that careful positioning can quickly give a good idea of what a texture map or lighting effect might look like.

Another speed gain when testing full traces can be made by increasing the pixel size. Obviously there is a loss of resolution, but again, light or shadow effects can be determined quickly. Overall, if you want to render an animation or a complex object in anything less than a lifetime, avoid reflective and transparent effects and use the solid model option. The final image is virtually identical to a full trace (unless there are shadows).

Conclusions

After several weeks' use there is little doubt that the images produced by *Turbo Silver 3.0* are wonderful; there is none at all that the object editor is a pain. It is, at the same time, too complex and not powerful enough. Almost any object can be modelled but only with a lot of careful selecting, movement and editing of individual points and edges.

In particular there is no tool for producing smooth, organic distortions of the objects like Magnet in Sculpt-Animate. There is also no way of producing a mirror image. That said, the basic interface works quite well, switching quickly from Front to Right Side or Top view (though Back, Left and Bottom would also have been useful). Zoom and Pan are also guite effective and the ability to set each object to Quick Redraw speeds up the re-draw time of the editor considerably. Nevertheless, if you have Sculpt3D or Sculpt-Animate 4D and Interchange it would probably be easier to model objects in Sculpt and port them across.

Animation in *Silver* we have not really tested yet. All of the tools for hierarchical and path animation seem to be there, but there is no obvious way to automatically generate transformations from one object to another – what *SA4D* calls Key Frame Inbetweening. The ability to cut, copy and paste frames in any order means that really complex animation choreographies can be constructed with ease – a real plus point.

Quibbles aside, it is the images that really matter; you can get used to almost any difficult interface if the final result is worth the effort. In the case of *Turbo Silver*, it is!

TUTORIAL THREE

LIGHT AND SHADOW IN SCULPT-ANIMATE

BELOW: This picture,
'E GLASS', shows how
the standard checkerboard pattern can be
used to new effect.
The pattern gives an
added sense of realism
to the translucent
'glass' of the letter.



Paul Cowan runs-a computer graphics business, Electric Pictures, in York. He produces animated logos and idents on an Amiga using Sculpt-Animate 4D Deluxe Paint III and Photon Paint 2. Paul has developed a number of simple techniques to improve the limited surface mapping properties of Sculpt-Animate, concentrating particularly on reflections. All of these techniques could equally be used in Turbo Silver.

If an object has a 100% reflective surface then it can only be seen if it is reflecting something. Even partially reflective surfaces – like metal or glass – look much more realistic if their surfaces show reflected objects. This means creating the 'something', often completely out of the picture.

Walking On Walls

The only patterned texture provided by *SA4D* is the now-clichéd chequerboard pattern but this can be used to great effect if the whole scene is rotated by 90 degrees or more. This creates the illusion that the checks are wall or ceiling tiles, or, if a very small check size is used, a woven fabric like tweed.



ABOVE: 'ROOM M' shows the advantages of reflecting an object on a surface.

RIGHT: 'LOCKS' uses the kind of light panels described in the text to show off the metal.

BELOW: 'PADLOCK P demonstrates the shadow technique.





Light Panels

A similar definition effect is shown in 'ROOM M' but this time it is an object within view that is reflected in the glass table – a key. In this picture are also several reflective metal surfaces, the key and the letter M on the wall behind. These are defined by a different sort of object – a luminous panel.

To get smooth illumination without shadows of objects in a photographic studio, a professional photographer creates a box of large translucent panels with floodlights behind. A similar structure can be made in *Sculpt* or *Silver* by creating panels and making them luminous. When rendered these project no light onto the objects, but show up as bright reflections. The background M in 'ROOM M' is reflecting several of these light panels.

Shadow Textures

Unlike Turbo Silver's textured surfaces, IFF backgrounds in Sculpt do not show shadows. Paul's solution to this problem is to render objects onto a black background and then port them into Photon Paint 2 to create backgrounds and shadows, as shown in 'PADLOCK P'. This technique even works with animations:

- 1 Render the image or all the frames with no sky or ground (best to use a black background).
- 2 Select a background texture and Remap it in *Photon Paint (PP2)* to match the first frame of the animation.
- 3 Load this background to several frames in *PP2* (as many as you have memory for, minus 1).
- 4 Load the first frame of the SA animation to the spare frame in PP2 and pick up the whole screen as a brush (use the whole screen to get correct registration).
- 5 Define the angle of the shadow that you require (keeping in mind the position of the light's original source) and set the background to a suitable blend and colour.
- 6 Turn on coordinates and place the brush onto the first *PP2* frame where you want it to appear. Note the coordinate position. Save the frame.
- 7 Load the next Sculpt-Animate frame into the PP2 spare, pick up the whole frame and position on the second PP2 frame and paste at the exact coordinate position of the first frame to ensure registration and smooth animation. Save the frame.
- 8 If you have enough memory you should be able to put together a reasonable animation and compress and save it direct from *Photon Paint 2*. For larger animations, save each image and then produce the anim in *Sculpt, Animagic, Deluxe Video III* etc.





WARNER BROS INC. 1990 ALL RIGHTS RESERVED

THIRD COAST TECHNOLOGIES

UNIT 8 BRADLEY HALL TRADING ESTATE, STANDISH, WIGAN WN6 0XQ TEL: 0257 472444 FAX: 0257 426577

A DI N DCD

HIGH SPEED HARD DRIVE PERFORMANCE FOR YOUR A500 & A2000

ICD

FASTER THAN ANY OTHER 'AMIGA COMPUTING'





- Xetec Hard Drives offer the ultimate in terms of performance for the Amiga A500
- Faster than any other competitor
- Transfer rates up to 800K/S
- Support of up to 9 Mega Bytes of Auto-Configuring RAM
- Compact host adapter with 1 metre connection cable
- Supports tape backup & networking under SCSI
- Supplied with cache buffering software
- Comes complete with 40 management utilities & manual

XETEC A500 HARD DRIVES & RAM EXPANSION

Xetec 50 Meg 25 Milli Head Park£599.99	Xetec RAM£129.99
Xetec 65 Meg 25 Milli Head Park£699.99	1.5Mb RAM£229.99
Xetec 85 Meg 25 Milli Head Park£799.99	2Mb RAM£349.99
Xetec 106 Meg 15 Milli Head Park£999.99	4Mb RAM£499.99
Xetec 330 Meg, 15 Milii Head Park£1999.00	8Mb RAM£999.99

Advantage 2000 SCSI performance hard drive controller. Supports transfer rates up to 900K/S. Fully autobooting supporting all embedded SCSI Drives & SCSI/ST506 controllers.



Adv Controller also supports optical drives, tape streamers & removable media drives. Cache buffering & 20 Nanosecond GAL Logic make this the fastest controller commercially available for the Amiga 2000 series. Programmable memory cache buffering is also available. Adv will support a drive in the landing bay or on the side of the card.

Adv 2000 performance SCSI Controller£129.99
Adv 22 Meg 25 Milli Auto Head Park & Lock£349.99
Adv 32 Meg 25 Milli Auto Head Park & Lock£399.99
Adv 50 Meg 25 Milli Auto Head Park & Lock£449.99
Adv 65 Meg 25 Milli Auto Head Park & Lock£549.99
Adv 85 Meg 25 Milli Auto Head Park & Lock£599.99
Adv 106 Meg 15 Milli Auto Head Park & Lock ...£699.00
Adv 330 Meg 15 Milli Auto Head Park & Lock £1999.00
Adv Controller & PC ST506 Drive Controller
to control any ST506 PC type drive£229.99

IVS TRUMPCARD



22 Meg 25 Milli Auto Park A500	.£349.99
32 Meg 25 Milli Auto Park A500	.£399.99
50 Meg 25 Milli Auto Park A500	.£449.99
106 Meg 15 Milli Auto Park A500	.£799.99
Meta 4 Ram 2 Megs 80 Nanosecond.	.£299.99
Meta 4 Ram 4 Megs 4.5 on A500	.£499.99
Trumpcard without drive A500	£199.99

- Supports all embedded hard drives
- Supports up to 4 Megs of fast Ram
- Auto-Boot Roms as standard uses fastfile
- Compact Design clips into side of Amiga A500
- Memory Expandable in 512K, 1Meg, 2Meg steps
- 2-3 times faster than the A590
- Unique design allows controller & drive to be used with Amiga A2000 should you ever upgrade

XT BOARD ACCELERATOR



XT Bridge Board Turbo Accelerator. Increases the speed of the board by 50% on all programs.

ALF



ALF INTERFACE FEATURES

Allows ST506 PC type drives to be added on to the A500. Supports transfer rates up to 600 K/S & will support any PC type drive. Complete with housed compact Interface & long connection lead supplied with over 40 utilities & comprehensive manual. Also available ALF Kit for Amiga A2000.

ALF A500 Complete Kit MFM	£229.00
ALF A500 Complete Kit RLL	£249.99
ALF A2000 PC Drive Kit RLL	£199.00
ALF A2000 PC Drive Kit MFM	£199.00

PERFORMANCE ENCHANCEMENTS FOR THE AMIGA

ACCELERATORS

PRO-GENLOCKS



16MHz 68000 Turbo Accelerator for the A500 & A2000. Offers minimum 95% speed increase across the board on all applications. Fully compatible & unlike a 68020 a fraction of the cost.

Hard Drive Upgrades for the A590 offer 50% more speed & whatever cpacity you require.



A590 50 Meg Upgrade	£299.00
A590 106 Meg Upgrade	
A590 1 Meg Upgrade	
A590 2 Meg Upgrade	



Pro-Genlock offering video in & out. RGB & PAL our. Built in fader. External colour & contrast controls. Supplied with a comprehensive manual & features that leave the Rendale standing.

A500 1M/Byte Ram Expansion including Battery Backed Clock

soldering.

£49.99

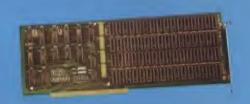
RAM EXPANSIONS

A501 expansion slot underneath A500. Auto configuration!!!



ICD Adram A2000 offering support of up to 8 Megs fully auto configuring Ram. Upgradable in stages 2, 4, 6 & 8 megabytes uses standard 1*1 D-Rams. Slots simply into any A2000 card. Supplied with Ram checker & manual.

into any A2000 card. Supplied with Ram checker & manual.	
Adram A2000 Unpopulated (No Ram)	£149.99
Adram A2000 2 Megs installed	
Adram A2000 4 Megs installed	
Adram A2000 6 Megs installed	
Adram A2000 8 Megs installed	



Exp 8000 offers up to 9 Megs of Ram Expansion for the A500. It uses standard 1*1 D-Ram & also has a Co-Processor slot. Fully Auto-Configuring requiring no

Exp-8000 (Unpopulated no Ram) .£249.99 Exp-8000 (2.5 Megs installed)£339.99 Exp-8000 (4.5 Megs installed)£499.99 Exp-8000 (8.5 Megs installed)£899.99



X-Pecs 3D glasses. Allowing 3D Images on your A500. Supplied to modify existing games & applications. A must for CAD & Digitising application.



High auality external floppy 86 track

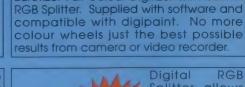
Internal 86 track 1Mb floppy. No case mods.



400 D.P.I. hand scanner offering 1.5 inches X-Tra width over any other scanner in its class supplied with manual & software.







Eurotizer Full Colour Digitizer with built in



Digital RGB Splitter allows images to be digitised in full colour without loss from a camera or recorder compatible with all digitisers.



IVS Printer Interface allows connection of a digitiser & printer to the Amiga at the same time acts also like buffer.

GENLOC

G2's VideoCenter may come in at £800 but it has all you need to become a Desktop Video director. **ANDY STORER** makes the connections...

he Amiga is now blessed with a choice of eight genlocks, ranging in price from as little as £100 to over £1000, and masses of low-cost and reliable video effects, editing, titling and animation software. The machine can rightly claim to be the King of Desktop Video – there's no other that comes near. While the Macintosh may have an equal number of add-ons and packages, the prices go all the way up through the roof.

The Amiga platform remains the only low-cost option because Commodore's engineers were forward thinking enough to see the possibilities of desktop video and build in the appropriate hardware right from the start...

Mere Technicalities

An external sync pulse generated by the clock chip was all that was needed, as it allows the mixing of computer and video signals. It permits the enabling hardware, the genlock, to synchronise the output from the Amiga's video chip with that of a live or recorded video source by synchronising the line and frame generators of each display's refresh rate. As such, both the horizontal and vertical scans of the two signals can be locked together.

But before this can be achieved, the three RGB signals from the Amiga must be combined to produce a composite or PAL video signal so they can be mixed with the composite video signal generated from a video source. Then it's simply a question of using hardware switches to flick between the two or merge them using the monitor's screen interlacing.

At this point, it's important to bear in mind that when you see an Amiga-generated image super-imposed over a video picture all you are seeing is a mix of signals. As such, you can by all means record that mix to videotape simply by redi-



...it does exactly
what is required –
rock-steady
superimpositions
and perfectlygraduated fades
and cross-wipes...

recting monitor output to a videotape deck, but there's no way you can save that mix to disk. We're not talking digital mixes here – just analogue.

Cost Effect

So why is it possible to spend well over £1000 – double the cost of your computer – on some relatively simple locking and switching hardware? Well, aside from mark-ups and profit margins, there's the fact that such devices are not mass produced and therefore unit costs are high. But there are also the main factors of features and quality.

The VideoCenter is built by a company with a long history of developing broadcast-standard genlocks costing up to £70,000, so there's years of expertise in the unit. For instance, all the input and output sockets on The VideoCenter are

directly connected to its customdesigned PCB, which instantly reduces the main cause of bad quality reproduction – signal instability due to wire interconnections.

Also, the unit auto-adjusts to fluctuations in the RGB signal output of different models of the Amiga. But perhaps the overriding quality factor is the VideoCenter's Super-VHS capability. S-VHS is preferable to standard VHS because its colour and video signals are separately encoded and as such produce less colour aberration in display.

In fact, because colour is coded separately the signal doesn't even need to be combined as PAL – it can be reproduced as full RGB. And you know what a difference that makes just by looking at the quality of your Amiga's display from its RGB feed compared to its composite video out.







Desktop Video On Your Amiga

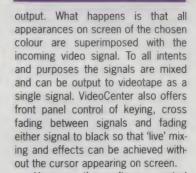
So what kind of things can you use a genlock for? Firstly, any demo or animation sequence too big to fit on disk can be sent to videotape for later display, but this is the only the tip of the iceberg. Desktop video is all about adding titling, logos and captions to videotape material - this material can always be other Amiga material you can't add moving titles too in a stand-alone package

But it's much more than just overlayed titles, no matter what animated wizardry may be involved. Video titles and graphics, presentations, advertising, training, education and security systems are the growth areas. There's no less reason to bring spreadsheets and databases into proceedings than flashy graphics and animations.

For instance, making use of a genlock it would be quite easy to produce a database that could incorporate moving video sequences - it might reside on videotape but you could just log the tape and use a remote control to navigate it .

The images on this page are all produce using colour-keying to superimpose an Amiga graphic onto a video frame. This idea should be very familiar from television, where a 'chromakey' system usually uses bright blue as the colour into which the second signal is keyed. That's why weathermen never wear blue!





However the software control also allows timed cross-fades and fades to black thereby removing human error. By clicking on the clock icons, a mix can be made to fade up or down in the time specified. In addition, any combination of fades can be configured by simply moving a cursor across a 360 degree grid.

Conclusions

G2's VideoCenter does exactly what is required - rock steady superimpositions and perfectly graduated fades and cross-wipes. Use it in combination with a package like Electronic Arts' Deluxe Video III or ZVP's Video Studio and you have a simple solution to saving extended animations and titling to tape.

For this is precisely why a genlock is a good investment if you have a video recorder. You can think of the tape deck as a device to which you can 'print' animations, logos, advertising sequences - even taping that impossible dash through the final level of Xenon II to impress your friends. But, at £800, VideoCenter is going to be purchased for professional applications and G2 is in a position to offer a range of additional kit, priced up to £25,000, to complement the system's potential.

Although lately some genlocks claim to feature S-VHS capability, they cheat by processing the signal as composite and then converting it back to S-VHS. The VideoCenter the signals intergrity maintains throughout. So the latest addition to the Amiga's range of genlocks may seem expensive at £800, but at the end of the day you're paying for quality of engineering.

Installation Sensation

While all this may sound a little too technical, the actual installation and use of the genlock couldn't be easier. The VideoCenter comes with its own power supply and cables and simply sits between machine and monitor. The 23-pin RGB lead which usually connects your Amiga to your monitor is plugged into a VideoCenter input and a corressponding RGB output carries the signal to your monitor.

By connecting a videotape recorder or camera via the supplied composite video lead to the genlock, you then supply the video signal you wish to mix. As a second video input is also available on the VideoCenter it also means you can combine two incoming video signals if you have, for instance, a camera and a video deck. Once the VideoCenter software is loaded you call up the main panel from which you can control all the hardware switches that are found on the unit by software instead.

There are four options. Video source signal only, Amiga signal only, video source superimposed over Amiga signal and vice versa. The latter two are known as 'keys' and the effects produced is referred to as foreground or background masking.

Superimposition, be it foreground or backgound, relies on a 'key' colour. In television production blue has traditionally been used as the key, but, by and large, most Amiga genlocks default to black - with a few offering the choice of any colour as a key.

G2's VideoCenter offers you 16 selectable colours from the Amiga's



DESKTOP VIDEO SOFTWARE

GENERAL VIDEO SOFTWARE

Deluxe Video III

Electronic Arts, 0753 49442, £99.99 The best all round package for combining computer and video images via a genlock. DV III offers super smooth animation, borderless overscan, dozens of transitions, frameaccurate recording down to a 1/60th second, and an object-orientated interface enabling you to author interactive presentations.

ANIMATION SOFTWARE

Deluxe Paint III

Electronic Arts, 0753 49442, £80 This excellent package produces high-resolution keying areas for genlocked superimposition and can be used for producing background pictures and retouching images.

Real Things RGB Studios, 082 581 2666, £25 An add-on for DPIII which provides scenes and brushes with which you can construct detailed, realistic images and choreographies of animated sequences with ease.

VIDEO TITLING **AND EFFECTS SOFTWARE**

Video Studio

Maze Technology, 081 520 9753, £99 Incorporating 12 of the most commonly used video production utilities in one package, this excellent package also includes 20 broadcastquality fonts along with 9 wipe patterns and a range of broadcast test signals. Fades up and down and logo and copyright screens you can customise yourself are also included.

MATARI ST and C AMIGA

Sixteen Bit Superdeals from the Sixteen Bit Specialists! CUSTOMERS PLEASE NOTE! When comparing prices remember ours include fast delivery by courier.

NEW!!

520STE Power Pack

Inc. VAT and Next Day Delivery



Power Pack includes:

- ★ 520STE 512K Keyboard with Built-in 1 Megabyte disk drive and TV
- Over £550 worth of games software, including OutRun, Gauntlet 2, R-Type, Space Harrier, Super HangOn and 16 more Top Games
- ★ Organiser Business Software including WORDPROCESSOR, SPREADSHEET and DATABASE
- * First BASIC and First Music Utility Software
- ★ FREE JOYSTICK AND FREE MOUSE MAT WORTH £4.95
- ★ All leads, manuals PLUS MOUSE and free mains plug!
- Hyper Pack S/W inc Hyper Draw, Hyper Paint and Borodino Battlescape War Game worth over £70.00

520STFM DISCOVERY PACK



- NEW! fantastic value for money pack includes:

 ★ 520 STE 512K memory keyboard with built in 1 megabyte double sided disk drive and TV modulator
- Game Pack including OUTRUN, SPACE HARRIER, CARRIER COMMAND and
- ★ UTILITY PROGRAMMES inc STOS GAME CREATOR, NEOCHROME painting package and FIRST BASIC programming language

 ★ ST tutorial programme and 'DISCOVER YOUR ST' beginners guide to the ST
- PILUS MOUSE, MOUSE MAT, MANUALS, ALL LEADS, METACOMCO BASIC AND MAINS PLUG!

1040STE BUSINESS PACK

★ Includes the new 1 megabyte 1040STE keyboard plus over £200 worth of business software including K-WORD wordprocessing software, K-CALC spread sheet and K-DATA Database software Also includes Metacomco BASIC, Mouse Pad, all Leads, Manuals and Mouse.

MEGA 1 BUSINESS Pack £529.00

Features:

Features:

* Separate Keyboard and System Unit

* Inc. all software supplied with 1040 STE Business Pack

* Blitter chip installed for faster graphics
Inc SM124 Mono Monitor.......£628.00

ACCESSORIES

Quickshot II Turbo Joystick£9.95	Branded Memorex 3.5" DSDD Disks
Competition Pro 5000 Joystick£13.95	Box of 10£13.95
Competition Pro with Autofire£14.95	Memorex Disk Box
Konix Speedking Joystick£11.95	For 40 3.5" Disks£8.95
Red Mouse Mat with Amiga logo£5.95	Amiga 1/2 Meg Expansion£99.95
Plain blue Mouse Mat£4.95	Control Centre Atari or Amiga .£44.95
Naksha Mouse for ST, Amiga or PC	£29.95
Contriver Amiga and ST Mouse with F	BEE Holder and Mouse Pad £20.95

DDINTERS

- Constante	
Star LC10 including interface lead for ST/Amiga	£169.00
Star LC10 colour including interface lead for ST/Amiga	£219.00
Star LC24-10 24 pin including lead for ST/Amiga	£249.00
Citizen 120D + NLQ including interface lead for ST/Amiga	£139.00
Citizen Swift 24 pin letter quality including lead for ST/Amiga	£309.00
Colour Version of Swift 24 pin	£349.00

AMIGA A500 **GAMES PACK** featuring BAT PACK or the new FLIGHT OF FANTASY PACK

£399.00

Inc. VAT and Next Day Delivery BAT Games Pack includes:

- ★ Amiga A500 512K Keyboard with Built-in 1 Megabyte disk drive.
- ★ Free TV modulator worth £24.99 allowing you to use the Amiga with a normal TV.
- * DELUXE PAINT II GRAPHICS PACKAGE.
- ★ FREE HOLIDAY 14 days accommodation
- * FREE, only-just-released BATMAN THE MOVIE games software.
- ★ NEW ZEALAND STORY arcade games software.
- ★ F18-INTERCEPTOR amazing 3D flight simulator software.
- ★ A further £230 worth of Games Software, including BUGGY BOY, MERCENARY, BARBARIAN, WIZBALL & six more games.
- * FREE JOYSTICK, MOUSE MAT AND 10 BLANK DISKS.
- ★ Amiga BASIC, Amiga EXTRAS 1.3, Workbench 1.3 PLUS the Amiga Step by Step Tutorial.
- uals PLUS MOUSE and mains plug

FLIGHT OF FANTASY Pack Includes:

- ★ F29 RETALIATOR fantastic NEW flight simulator replaces Batman
- ★ RAINBOW ISLANDS smashing new arcade game replaces New Zealand Story
- * ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS replaces F18 ★ Everything else listed for BAT Games Pack.

AMIGA 1 MEG BAT GAME PACK £499.00



- 1 Meg Bat Games Pack includes:
- ★ Fitted 1 Megabyte Memory Expansion + Real Time Clock Card
- ★ Everything listed for the A500 Bat Game Pack
- ★ DRAGON'S LAIR 1 MEG MEGAGAME!

AMIGA A500 **CLASS OF THE 1990'S BUSINESS + EDUCATIONAL PACK** £549.00

FEATURES:

- ★ Amiga A500 + TV Modulator
- ★ Midi Interface + Software
- * Kind Words II word processor
- * Page Setter DTP
- * Super Base Personal Database
- ★ Maxiplan 500 Spreadsheet
- ★ Amiga Logo, BBC Emulator, Deluxe Paint II
- ★ Mouse mat, 10 blank disks and disk wallet

EXTERNAL DISK DRIVES

Cumana 1 Megabyte Atari or Amiga	£89.95
NEC 1 Megabyte Atari or Amiga	£79.95
Atari SF314 1 Megabyte	£139.00
Amiga A1010 1 Megabyte	£99.95
Atari Megafile 30 Hard Disk	£439.00
New! Commodore A590 20 meg hard disk	£369.00
A590 Hard Disk + Memory Upgrade installed	Phone

MONITORS

ı		
ı	Commodore Amiga A1084 stereo Monitor inc lead	£259.00
ı	Atari SC1224 Colour Monitor inc lead	£259.00
ĺ	Atari SM124 Mono Monitor including lead	£119.00
ı	Philips CM8833 stereo colour monitor inc. lead for ST or Amiga	£249.00

24 HOUR CREDIT CARD HOTLINE @ 0908 378008

To order either call the orderline above with your Credit Card details OR make a cheque or P.O. payable to: Digicom Computer Services Ltd and send it with your order to the address below. Showroom open at the address below Mon-Sat 10.00am - 6.00pm.



Unit 36, Wharfside, Fenny Stratford, MILTON KEYNES, MK2 2AZ.



All prices include VAT and delivery by courier Licensed Credit Brokers * Written quotations available on request APR 34.5% Variable.



hey're live! They're Interactive! They're the world's first video games that put you into the screen, into the action and in command". So claims the Canadian company behind Mandala technology—"an open door into virtual realities".

Toronto firm Vivid Effects has developed the Amiga-based Mandala video system to enable a user to interact fully with computer generated and live video images. Mandala features a heavily-customised 68000 chip, Amiga graphics chips and a souped-up maths co-processor to process incoming video signals from a camera mounted above a monitor.

Utilising 9Mbytes of RAM, Mandala calculates the position of the user or player quickly enough to be able to re-position graphics code in accordance with human movement. What you see on screen is a digitized image of yourself overlayed onto a live or recorded image. This image can either be an Amiga generated display or a video sequence, or, through making use of a genlock, a combination of both.

Making a movement causes the figure to move correspondingly on screen and software handles the respective background changes. The trick is to process that movement in real time so that the user senses no delay in his movement vis a vis the screen refresh rate. It's a trick Vivid Effects isn't worried about revealing.

If this level of interaction weren't enough, the system is also MIDI compatible, allowing users to play musical instruments without actually touching them by integrating sound modules, sequencers and synths. One Vivid Effects demo allows you to play drums just by making drumming motions. Labatts' Beer has used the system in public promotions to invite users to make their own pop promo. In addition, Vivid has also taken the system to various live music video performance art events in New York, Amsterdam, Tokyo and Paris.

Already the system is being used in museums, science centres and theme parks for more interactive information requirements, but the company is just beginning to introduce more sophisticated variants of Mandala into Canadian shopping malls and arcades.

At the recent Tech 2000 exhibition in Washington DC, visitors were invited to 'Step inside television and participate in a virtual world reality... just a wave of the hand will instantly transport you'. 10-foot by 8-foot walkin environments were constructed which contained large-screen projections of graphics and moving video running off laser disks linked by Amiga genlocks. Video cameras followed the movements of people entering the space and they were able to 'wander' for up to an hour

VIRTUAL AMIGAS

Wander into your screen for a walk through the innovative Mandala system with ANDY STORER.



ABOVE: Using the system simply requires contorting yourself wildly into the most embarrasing poses. Whether it's limbo dancing or break dancing, Mandala would undoubtedly be a great hit at parties.

BELOW: Sports sims can also be made more interactive. Besides basketball, Mandala's also been used to play baseball and ice hockey.

through 3D virtual environments, seeing their position on the screens depicted by white silhouettes.

Vivid also put Mandala to gaming use too. One interactive environment is Mandala Baseball where a player holds an animated baseball bat to hit oncoming animated baseballs. At the Canadian Hockey League's Hall of Fame a system was demonstrated in which players saw themselves in front of the goalnet and had to move hands and feet to prevent scores.

In business presentations, the system is also being used to allow live presenters to appear within graphs and control animated bar charts on large video monitors, while Bell, one of Canada's main telecom companies, is using Mandala as a teleconferencing tool. Vivid lease the system to corporations at a cost of \$1000 to \$1500 a day.

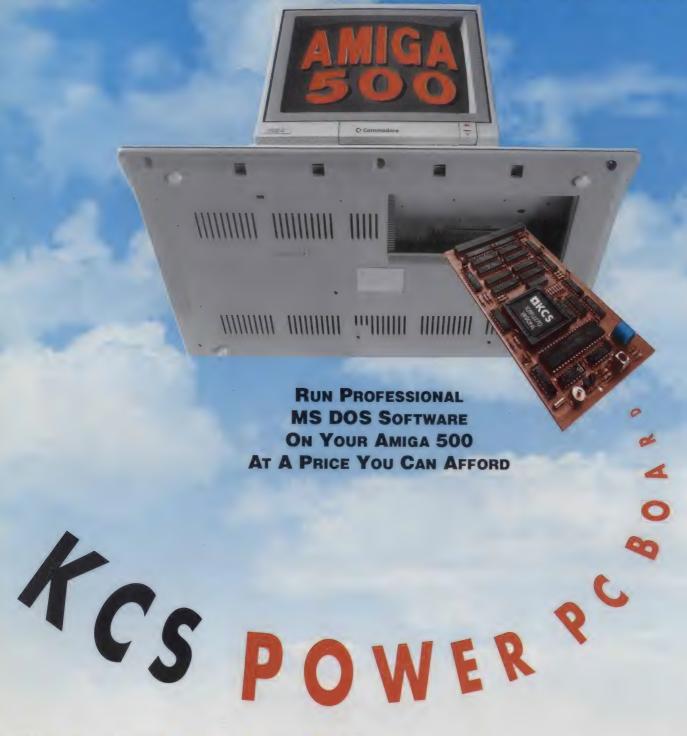
So this forefront technology doesn't come very cheaply – a basic installation starts at around £10,000 and can cost ten times that depending on a client's needs. Some nine years in planning, Mandala has finally come together with the advent of the Amiga's new graphics handling and multimedia capabilities. But the system's inventors, Vincent John Vincent and Frank MacDougall, are now developing home versions.

The home unit will comprise an add-on box for the Amiga which will incorporate all the necessary hardware additions and the video camera. The company hopes to have such a home system available in just over a year and expects the price to be around £600.

In the meantime, Vivid Effects is currently negotiating with top US games houses to produce home versions of interactive sports and action simulations. It would seem that the Amiga video adventure game is just around the corner. You can also bet that the CDTV is going to be one of the first recipients of Mandala's exciting potential.



THE AMIGA 500 PC/XT IS HERE



WHY DID YOU BUY AN AMIGA 500?

Of course, because of its superb graphics, music and animation capabilities. However if you want to get serious, you soon realise that it is distinctly lacking in memory and professional

Well - They Said It Could Never Happen - But It's Here At Last!

You! In your own home can transform your Amiga 500 into a real IBM compatible with Amiga memory expansion of up to one and a half megabytes.

It's simple - No screwdriver, no soldering iron and no technical knowledge required. Just turn your Amiga over, open the cover, slide the Power PC Board into the connector, close the cover and your Amiga PC/XT is ready. (In other words, no loss of guarantee)

You are now ready to use a wealth of professional MS DOS software at speeds faster than a PC/XT (ind. review), and in colour, with compatibility thanks to Phoenix-Bios.

You can also rely on the correct date and time at any moment in Amiga and MS DOS mode (with the aid of a battery).

- Video support: monochrome, Hercules and Colour Graphics Adaptor (CGA) (4 and 8 colours)
- Disk support: internal 3.5" external 3.5" external 5 1/4" drive. (Software-upgrade to H/D A590 in pipeline)
 Including MS DOS 4.01, MS DOS shell and GW Basic (market value approx £130.00)
 Including English Microsoft books + KCS manual + FREE software

- * Further exciting software upgrades in the pipeline

- Available memory: 704KB + 64KB EMS in MS DOS mode, 1 megabyte + 512KB RAM (disk) buffer in Amiga mode
- No extra power supply necessary thanks to the most modern CMOS and ASIC technology OK with TV. No special monitor required Price: £320.00 including VAT.

- For export price please contact us
- Trade enquiries welcome (UK Scandinavia Australia/NZ and all English language.)

Compatibility is excellent, but no-one can guarantee every single program available therefore if your purchase depends on a particular program, please ask us first or send in a copy of the program. (With suitable S.A.E if to be returned). Price subject to change without notice.

BITCON DEVICES LTD.

88 BEWICK ROAD, GATESHEAD, TYNE & WEAR, NE8 1RS ENGLAND.

(091) 4901919/4901975. Tel:

Fax: (091) 4901918

Special

JOIN? NRG (Energy magazine) News, Reviews and Graphics. Screen shots, pack city Cybertoon and the kill-or-die adventures of the Cyberpunk *NRG* street gang - It's Cyber-fantastic! *NRG* - bi-monthly to all Special Reserve members. *Release Schedules*, sent bi-monthly, and updated catalogue information. *Sales hotline*, to 8pm weekdays and 5-30pm Saturdays.

Fast despatch of stock items individually wrapped by first class post. Written confirmations (and receipts) sent when we receive each order.

Catalogue, Membership Card & Folder for NRG **Refunds** or change of order on request if delayed. **No Obligation** to buy. Over **30,000** have joined!

£6.00

BRUTAL PRICES!

Sega Megadrive

+ extra Joypad FREE 189.99 **Megadrive Software**

Lynx colour handheld, mains powerpack, California Games 159.99 Lynx Software

...23.49 Gates of Ze ...23.49 Gauntlet 323.49 Rampage .

iga 512K RAM upgrade . mana 3.5" 880K disk drive r LC10 NLQ printer

er Lead petition Pro Extra joystick kjoy Jet Fighter joystick Megablaster joystick

65p each

SONY 3.5" DISKS

WHY NOT

Amiga Software

The Gold of the Go		
688 ATTACK SUB16.99	FULL METAL PLANETE 15.49	PUBLISHERS CHOICE DTP
ADIDAS CHAMP FOOTBALL 15.99	FUN SCHOOL 3 (2-5 YRS)15.49	(KIND WORDS 2. PAGESETTER
AMOS (GAMES CREATOR)29.49	FUN SCHOOL 3 (5-7 YRS)15.49	1.2. ARTISTS CHOICE, FONTS.
ANARCHY15.99	FUN SCHOOL 3 (7+ YRS)15.49	LASER SCRIPT) (1 MEG)59.5 RAINBOW ISLAND15.5
B.S.S JANE SEYMOUR16.99	FUTURE WARS17.49	RAINBOW ISLAND15.5
BACK TO THE FUTURE 215.99	GAUNTLET 2	RAMROD16.5
BACKGAMMON PRO14.99	GHOULS 'N' GHOSTS16.49	RED STORM RISING16.4
BALANCE OF POWER 199015.49	GRAND PRIX CIRCUIT16.49	RESOLUTION 10115.5
BARDS TALE 1	GRAVITY	RISK
BARDS TALE 2	GUNSHIP15.99	RORKE'S DRIFT
BATTLE OF BRITAIN19.99	HAMMERFIST15.99	ROTOX 16
BATTLECHESS16.49	HARLEY DAVIDSON15.49	ROTOX 16.5 SCRABBLE DE LUXE 12.5
BATTLEHAWKS 194216.49	HERO'S QUEST (1 MEG)21.99	SEASTALKER (INFOCOM)15.5
BATTLEMASTER16.49	HEROES18.99	SEASTALKER (INFOCOM)15.1 SECRET AGENT SLY SPY15.1 SHADOW WARRIORS15.1
BEAST 221.99 BEYOND ZORK (INFOCOM)24.99	HOLLYWOOD HIJINX19.99	SHADOW WARRIORS15.5
BEYOND ZORK (INFOCOM)24.99	HOME OFFICE KIT	SHADOWGATE15.4
BLADE WARRIOR15.99	(KIND WORDS 2.0, MAXI PLAN,	SHERMAN M416.5
BLOCK OUT12.99	INFO FILE, PAGESETTER, ARTISTS' CHOICE, FONTS)86.49	SHOOT 'EM-UP CONST' KIT 18.4 SIM CITY TERRAIN EDITOR9.5
BLOODWYCH DATA DISK9.99 BOMBER18.49	HOUND OF SHADOW16.99	SPACE ACE
BOMBER MISSION DISK13.49	IMPERIUM16.99	SPACE QUEST 1 (SIERRA)16.4
BREACH 2 (1 MEG)15.99	INDIANA JONES ADVENTURE 16.99	SPACE QUEST 2 (SIERRA)16.4
BRIDGE PLAYER 215019.99	INFESTATION15.49	SPACE QUEST 3 (SIERRA)21.4
BUDOKAN16.49	INFIDEL (INFOCOM)16.49	SPACE ROGUE17.4
CABAL15.49	INTERNATIONAL 3D TENNIS 16.49	SPELLBREAKER (INFOCOM) 21.4
CARTOON CAPERS12.49	IRON LORD16.49	STARBLADE16.4
CASTLE MASTER15.99	IT CAME FROM THE DESERT	STARCROSS (INFOCOM)21.4
CHASE H.Q	DATA DISK (1 MEG)10.49	STARFLIGHT16.5
CHESS CHAMPION 2175 19.99 CODENAME ICEMAN24.49	JACK NICKLAUS GOLF16.49	STARTER KIT (KIND WORDS 2.0, FUSION
COLONEL'S BEQUEST24.49	J. NICKLAUS GOLF DATA18.99	PAINT, SUPER SKI, CRAZY
COLORADO	JUMPING JACKSON12.49	CARS, MINIATURE GOLF)43.4
COLOSSUS X CHESS 15.49	KHALAAN15.99	STEVE DAVIS SNOOKER 12.4
COLOSSUS X CHESS15.49 CONQUEROR15.99	KICK OFF 212.49	STORM ACROSS EUROPE 19.5
CONQUESTS OF CAMELOT 24.49	KICK OFF EXPANSION DISK 7.49	STRYX12.5
CRACK DOWN16.99	KILLING GAME SHOW16.49	STUNT CAR RACER15.5
CYBERBALL12.99	KIND WORDS 2.0 (W/P)29.99	TEAM YANKEE17.4
DAMOCLES	KINGS QUEST 1, 2 & 321.49	TEENAGE MUTANT NINJA (HERO) TURTLES24.5
DATA STORM12.49	KINGS QUEST 4 (SIERRA)21.49 KLAX12.99	
DEJA VU 2	KNIGHTS OF CRYSTALLION 19.99	THE KEEP
DELUXE PAINT III51.49	LAST NINJA 216.49	THE PLAGUE16.4
DOUBLE DRAGON 2 13.49	LEADERBOARD BIRDIE16.49	THEME PARK MYSTERY 15.9
DRAGON NINJA15.99	LEISURE SUIT LARRY 118.99	THIRD COURIER15.5
DRAGON'S LAIR (1 MEG)28.49	LEISURE SUIT LARRY 221.49	THUNDERSTRIKE16.4
DRAGONS BREATH18.99	LEISURE SUIT LARRY 324.49	TIE BREAK15.5
DRIVING FORCE16.49	LIFE AND DEATH15.49	TOWER OF BABEL16.4
DUNGEON MASTER EDITOR 7.49	MANIAC MANSION	TREASURE TRAP
DYNASTY WARS16.99 DYTER-0712.49	MAVIS BEACON TYPING17.99 MIDWINTER18.99	TURRICAN 19.
E-MOTION	MIGHT AND MAGIC 2 19 99	TURRICAN 12.4 ULTIMA 5 17.9 UMS CIVIL WAR DISK 9.4
EAST VS. WEST15.49	MIGHT AND MAGIC 219.99 MOONMIST (INFOCOM)15.99	UMS CIVIL WAR DISK 9.4
ELVIRA19.49	MUSIC X99.99	UMS VIETNAM DISK9.4
ENCHANTER (INFOCOM)18.49	NECRONOM16.99	UNINVITED15.4
ESCAPE FROM	NINJA WARRIORS16.49	UNTOUCHABLES15.9
SINGE'S CASTLE28.49	OPERATION THUNDERBOLT 15.99	VENUS - THE FLY TRAP13.4
ESCAPE FROM THE PLANET	PAPERBOY12.99	VETTE (CORVETTE)18.4
OF THE ROBOT MONSTERS 12.99 F16 COMBAT PILOT15.99	PHANTASIE 3 (SSI)	WAR IN MIDDLE EARTH15.4 WARHEAD
E10 STEALTH EIGHTED 19 00	PIPEMANIA	WARHEAD
F19 STEALTH FIGHTER18.99 F29 RETALIATOR15.99	PIRATES15.99	WINGS (CINEMAWARE)18.5
FALCON MISSION DISK 213.49	PLAYER MANAGER12.49	WISHBRINGER (INFOCOM)19.5
FERRARI FORMULA 116.49	POLICE QUEST 1 (SIERRA)15.99	WITNESS (INFOCOM)9.9
FINAL BATTLE	POLICE QUEST 2 (1 MEG)21.99	WORLD BOXING MANAGER 12.9
FIRE AND BRIMSTONE16.49	POPULOUS16.49	WORLD CUP - ITALIA 9012.4
FLIGHT SIMULATOR 225.49	PROMISED LANDS DATA7.99	X-OUT12.4
FLIMBO'S QUEST16.49	POWERDROME16.49	XENOMORPH15.4
FLOOD	PRO TENNIS TOUR16.49	ZOMBI
POOTBALL DIRECTOR 212.99	PROTEXT W/PROCESSOR64.99	ZUAK ! (INFOCOM)16.4

IF THE GAME YOU ARE LOOKING FOR IS NOT IN THIS LIST PLEASE CHECK THE MEGA-SAVERS BELOW. PHONE US ON THE SALES LINE FOR A WIDER SELECTION

RIC	10	FF
271		
63	15	M
2 4	TAS .	16
KICK	OFF	5 00



XENON 2 6.99



POWERDRIFT 4.99

Amiga Mega-	Sav	/e
ADVENTURE CONSTR' KIT	13 99	KR
ALTERED BEAST	7.49	KU
ARCHIPELAGOS	6.99	LA
ARKANOID	10.49	LA
AUSTERLITZ (BATTLE OF)	11.99	LE
BAAL	6.99	LE
BALLISTIX	6.49	LO
BARBARIAN 2 (PALACE)	0.40	ME
BATTLE SQUADRON	13.49	MIC
BATTLE SQUADRON	7.99	MII
BLACKLAMP	5 00	NE
BLOOD MONEY	7.49	NE
BLOODWYCH	7.49	NIC
BUGGY BOY	9.49	NO
CAPTAIN BLOOD	5.99	PA
CARRIER COMMANDCHESSMASTER 2000	7.99	PA
CHRONOQUEST 2	0.49	PA
CHUONOGOESI 5	7.00	PO
CLOUD KINGDOMSCONFLICT EUROPE	6 99	PU
CONTINENTAL CIRCUS	11 49	RO
CORRUPTION (M/SCROLLS)	9.99	SH
CUTTHROATS (INFOCOM)	11.99	SH
DRAKKHEN	13.99	SIN
DUNGEON MASTER (1 MEG)	9.99	SK
DYNAMITE DUX	7.49	SK
EDDIE EDWARDS SUPER SKI	4.99	SP
ELIMINATOR (1.2 AMIGAS)		ST
ELITE	9.99 E 00	SU
E16 EAL CON	12 00	SW
F16 FALCONF16 FALCON MISSION DISK 1	7 99	TE
FISH! (M/SCROLLS)	9.99	TH
FISH! (M/SCROLLS)FOOTBALL MANAGER 2 +EXP.	10.99	TH
FUN SCHOOL 2 (2.6 6.8 or 8.1)	7.00	TH
GUILD OF THIEVES	9.99	TIN
GUILD OF THIEVES HARD DRIVIN' HIT DISKS VOLUME 2	9.99	TR
HIT DISKS VOLUME 2	8.49	TR
HOSTAGES	7.49	TU
INDIANA IONES ACTION	11.40	TV
HYBRISINDIANA JONES ACTIONINTERNATIONAL KARATE +	7.49	UM
IT CAME f.t. DESERT (1 MEG) .	.10.99	VIE
JINXTER (M/SCROLLS)	9.99	VO
KICK OFF	5.99	WA
KID GLOVES	7.49	WH
KING OF CHICAGO	11.99	XE
days source con sourcessourcessources	-	-

KRISTAL	8 90
KINT	7 40
KULTLANCELOT (LEVEL 9)	8 90
LASER SOLIAD	7 99
LASER SQUADLEATHER GODDESSES	0 00
LEATHERNECKS	5 00
LEATHERNECKSLOMBARD RAC RALLY	10.49
MENACE	4 00
MICROPROSE SOCCER	8 40
MICROPROSE SOCCER MILLENIUM 2.2 NEVER MIND. NEW ZEALAND STORY NIGEL MANSELL'S GR' PRIX	6.99
NEVER MIND	6.49
NEW ZEALAND STORY	9.49
NIGEL MANSELL'S GR' PRIX	5 99
NORTH AND SOUTH	10.49
PACLAND	5 99
PACMANIA	6.49
PACMANIAPAWN (M/SCROLLS)	9.99
PHOTON PAINT POWER DRIFT PURPLE SATURN DAY	6.49
POWER DRIFT	4.99
PURPLE SATURN DAY	.7.49
BOCKET BANGER	8.99
ROCKET RANGERSHADOW OF THE BEAST	9.99
SHOGUN (INFOCOM)	8.99
SHOGUN (INFOCOM)	13.99
SKYCHASE	6.49
SKYFOX	5.49
SPEEDRALL	6.49
STARGLIDER	6.49
STARGLIDER 2	11.49
STARGLIDER STARGLIDER 2 SUPER WONDERBOY SWORD OF SODAN TEENAGE QUEEN STRIP POKER	7.99
SWORD OF SODAN	7.99
TEENAGE QUEEN STRIP POKER	8.49
THE PRESIDENT IS MISSING	5.99
THREE STOOGES (CINEMAWARE)	6.99
THUNDERBIRDS	5.99
THE PRESIDENT IS MISSING THREE STOOGES (CINEMAWARE) THUNDERBIRDS TIME & MAGIK (LEVEL 9) TRIAD 2 (MENACE, BAAL, TETRIS) TRIVIAL PURSUIT	7.99
TRIAD 2 (MENACE, BAAL, TETRIS)	7.99
TRIVIAL PURSUIT	8.49
TURBO CUPTV SPORTS (U.S) FOOTBALL	6.49
TV SPORTS (U.S) FOOTBALL	11.99
TV SPORTS BASKETBALL UMS UNIVERSAL MILITARY SIM.	11.99
UMS UNIVERSAL MILITARY SIM.	7.49
VIRUS	6.49
VOYAGER	9.49
WATERLOO	10.49
WHO FRAMED ROGER RABBIT .	9.99
XENON 2 MEGARI AST	6.99



SHADOW of the BEAST 9.99



DUNGEON MASTER 9.99



ELITE 9.99

All the benefits of Special Reserve plus:

Confidential. Our 32 page bi-monthly magazine is essential reading for those interested in adventures or role playing games.

Written by experts. Confidential has covered everything from How to Host a Murder to Which F16 Flight Simulator? Our agents, led by the Master Spy known as "The Boss Upstairs", seek out the secrets of RPG's, FRP's, MUG's, PBM's, Leisure Suit Larry, The Russians, Elvira... & more. Note: You can subscribe to Confidential without joining

the clubs for £15.00 (UK) by entering "CONFIDENTIAL SUBSCRIPTION" on the order form.

*Myth. Written by Magnetic Scrolls, authors of The Pawn, exclusively for members of Official Secrets. Myth is a small adventure set in Ancient Greece. In it you'll meet. The Ferryman, cheat Death and face the nine-headed Hydra. Myth includes the famous Magnetic Scrolls parser and optional stunning EGA graphics and is included in the price of membership.

*Amiga Format said: "An excellent adventure... witty, cunning and just plain good fun! If you liked Fish! you'll probably like this, because they're very similar in style: you may even prefer Myth, it's that good!"

*With Ratings: Crash 91%, CU 90%, Amiga Format 87%, TGM 85%

Myth Ratings: Crash 91%, CU 90%, Amiga Format 87%, TGM 85%
• Drakkhen or Sim City (rrp 29.99).

Myth Ratings: Crash 91%, CU 90%, Amiga Format 87%, TGM 85%

• Drakkhen or Sim City (rrp 29.99).

Of Drakkhen, ST Action said: "Drakkhen really impressed me. For me, the game was a subtle cross between my all-time favourite, Dungeon Master, and the SSI fantasy role-playing games. The graphics are superb.... Overall, Drakkhen is an excellent RPG, one that will take quite some time to beat" and Zero said: "Absolutely brilliant".

Of Sim City, ACE said: "Sim City is a politician's - or a gamesplayer's dream...comparisons spring immediately to mind with Populous... but Sim City seems to have much more depth...." and C&VG said: "Sim City is utterly fab"

• Help-Line. Manned weekdays until 8pm and Saturdays - with solutions to

8pm and Saturdays - with solutions to most adventures



Annual UK Official Secrets Membership including 6 issues of Confidential, Myth, Drakkhen or Sim City, Help-Line and Special Reserve membership.

Atari Lynx AMIGA 500 Computer ... 399.99 Official UK Version. In stock now

Two Jet Fighter Joysticks FREE and F29 Retaliator, Rainbow Island, Deluxe Paint 2, E.F.t.P.o.t. Robot Monsters, TV Modulator & Mouse.

PHILIPS 8833 stereo monitor249.99 PHILIPS TV TUNER for monitor 49.99 MONITOR STAND fits over Amiga...19.99

INEVITABLY, SOME OF THE GAMES SHOWN MAY NOT YET BE RELEASED. ALL GAMES ARE DESPATCHED AS SOON AS POSSIBLE Inter-Mediates Ltd. Reg. Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. VAT reg. no. 424 8532 51

PHONE 0279 600204

(SURCHARGE OF 50P PER GAME FOR TELEPHONED ORDERS)

(PLEASE PRINT IN BLOCK CAPITALS

Name & Address		
Post Code	Tel	
Computer Payable to: Special Reserve P.O. Box 847,		
Existing members please enter your Membership No.		C40 World on

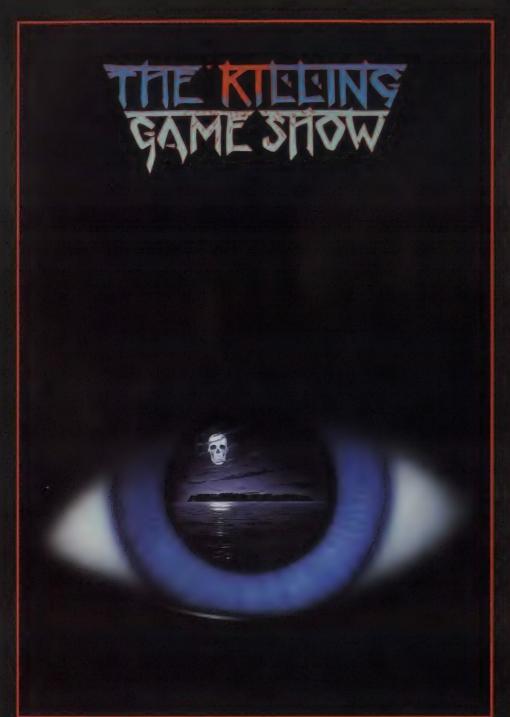
Special Reserve £6 UK, £8 EEC, £10 World or Official Secrets £29.99 UK, £34.99 EEC, £39.99 World with Drakkhen [or with Sim City and Myth

PLEASE ENTER MEMBERSHIP FEE	£	
Item	£	

£

Software Prices include UK or EEC Postage. World software orders please add £1.00 per item or non-software items such as jovstick or blank did please add 10% EEC or 25% World for carriage. Overseas orders must be paid by credit card.

Credit card expiry date *CHEQUE/*POSTAL OBDEB/*ACCESS/*VISA











THE KILLING GAME SHOW . . .

... WILL HAVE YOU CLIMBING THE WALLS - IT'S THE ONLY WAY OUT!

Suited in limited-protection armour you're the unwilling contestant on THE KILLING GAME SHOW. In front of a TV audience of millions you must battle your way to the top of 16 Pits of Death infested with Hostile Artificial Life Forms specially created by THE KILLING GAME SHOW's manic scientists to give you a hard time.

But . . . don't forget the rising fluid or it's "next contestant time".

You must give the viewers their value for money — collect the awesome weapons and tools — if you can!

First prize is your life — Don't waste it!

Screen Shots from the Amiga version

SEEING IS BELIEVING

PSYGNOSIS FREEPOST LIVERPOOL L3 3AB UNITED KINGDOM Tel: 051-709 5755







BOLDLY GOES WHERE NO MAGAZINE HAS GONE BEFORE

THE RATINGS **EXPLAINED**

INTELLECT

How much real thought do you have to put in to play the game? Just because a game is mindless doesn't necessarily mean it's bad, but a game with a high intellect rating says immediately that you'll need to think to gain maximum enjoyment.

HE COME

en's Mercenary ouches down in Damocles P.36

Ocean's grunts do a tour in the DMZ P.60

Hacking for fun and profit in 21st century P.71

PED STO

Nuclear subs get serious in the North Sea P.52

But did the Butler do it? P.45

WELLTRIS P.59 HARLEY DAVIDSON P.48 LAST NINJA II P.68



Walking around the dusty halls of Eris Post Office reveals this useful location-finder. So why do they still lose the mail?



Ah... isn't that thoughtful, putting a bed in the waiting room while they search for your 'misplaced' packages? Just five minutes... ZZZ.



I honestly don't remember seeing one of these buildings amongst the towers in the Pride of the West Midlands!



"Please fasten seatbelts, extinguish all cigarettes and pass the used sickbags to the stewardess on leaving the plane. Thank you."

ou, the Mercenary, have just managed to get it together to blast away from the hostile world of Targ when a message flashes up on your computer terminal. "Distress call from Eris State President, Dialis Planet 5, Gamma system – the comet Damocles is on a collision course with Eris. Assistance required urgently. Large reward."

Those last two words are particularly interesting... they involve money! After toying with the idea for a while, you think "Sod it, I want a holiday!" You send a brief reply to the President, then decide to cruise around taking it easy for a while. After a few months, the

cash supply is finally beginning to dwindle... looks like it's time to check out the missions available. What about that Eris problem? Could be mucho moolah for that one, you think, so it's off to the Gamma system.

Benson, your computer, takes you in to land at Eris Spaceport, where a VIP limo has been thoughtfully left so that you can make your way to the President's office. The premier is a little miffed that you've taken this long to arrive and has, in fact, decided it's a good idea to leave the planet along with the other evacuees. Oh well, I suppose you'll have to look for the clues yourself...

DAMO

NOVAGEN £24.99 ■



Who cares if they're asleep at this time of night, let's go and strafe the living nightlights out of the place... DAKADAKADAKA!

GRAPHICS AND SOUND

Damocles' 3D world has been superbly designed, using solid and smoothly animated polygons to build a believable world to explore. One point where solid 3D games often fall down is by the incompetent use of clipping when sections of buildings and objects often appear and disappear at odd moments to save memory. Damocles manages quite happily to conquer this obstacle, so that everything you see approaches from a speck in the distance to full size in a very realistic way. Unfortunately the sound doesn't match up to the quality of the graphics. All the effects are far too thin and synthetic to create any atmosphere, so the volume will usually end up in the 'off' position during play.

LASTING INTEREST

The sheer size of Damocles is quite remarkable (to use a famous sports idiom). The big cities lie on huge continents, which sit on massive planets surrounded by a vast solar system. Simply flying from place to place eats up an incredible amount of gametime. All the locations have their own specific atmosphere, depending on the planet and the purpose of the building, and even the trivial locations have objects lying around the rooms.

Leaping straight into the game and zooming from place to place won't get you very far, though. You really need to have your thinking hat firmly attached to your noggin to link all the clues, and it will still be a rather long time before you manage to

In Damocles — Novagen's long-awaited follow-up to the highly-successful Mercenary — you play the hardy soldier of fortune that rose to fame after his antics on the planet Targ. This time, as well as struggling for personal financial gain, the future of a planet is at stake. The comet Damocles is on a collison course with the planet Eris. You must follow the trail of clues in an attempt to find the mega-destructive Novabomb and the necessary triggers in order to destroy the comet.

Unfortunately, since the entire population of Eris has fled to safety, the only clues available are by way of documents left lying around various locations on Eris. It's surprising exactly how much information can be gleaned from a discarded fax message.

The trail of clues leads you to the whereabouts of the bomb and the triggers, but the post-office being as it is, they seem to have been... er... 'misplaced' somewhere along the line. You must use the clues and some pretty hefty lateral thinking to find your way around the Gamma system, picking up and making use of a variety of items along the way.

But don't worry too much about the outcome. After all, it's all for one – and every man for himself! **Maff Evans**



The deadly comet Damocles itself, hurtling through the blackness of space towards the impending destruction of planet Eris.

CLES

Joystick and Keys



Vauxhall Calibra? Thing of the past! Feast yer eyes on this beautiful little mover! One careful Presidential owner...

get the Novabomb and triggers together, never mind stopping the comet. If you have a lot of things to contend with in life – like work, eating and sleeping – then think twice before you play Damocles, as these things will almost certainly be ignored!

JUDGEMENT

After the incredibly long wait, the inevitable doubts about how good the game would actually be began to creep in. The original Mercenary and the Escape from Targ extension were hailed as ground-breaking games and managed to secure their place in the software hall of fame. So how does Damocles compare (doubts not withstanding)? You can all breathe a sigh of relief, since the answer is most definitely 'very well indeed'. Paul Woakes has

included all the aspects that made Mercenary such a hit along with more additions than anyone could have hoped for. The solid 3D works brilliantly, the vast playfield is just begging to be explored and the puzzle element is conducive to long hours sat in front of the monitor. Even in this day and age, with a myriad of 3D adventure games vying for the public's attention, Damocles is a shining island gem in the software sea. If you're not convinced, then try it as soon as possible - here our case rests.

GRAPHICS 8
SOUND 3
INTELLECT 8
ADDICTION 8
OVERALL 92%



Where's the map...? Now then - Dion... Oh! There it is in front of us! Better get the brakes on sharpish!



This building looks important. What can it be? Unfortunately the computer doesn't seem to want to tell us!



Get lost? Nah, no problem. All we have to do is follow these here road signs... now which exit do we need...?





Quiffy crawls along a handy beam to get away from a nasty ghostie, but time is tight - if that beam turns off then it's a deadly plunge past the psycho teddy to the spikes below.

FLOOD

ELECTRONIC ARTS £24.99 Joystick

fter coming up with the graphically superb Fusion and the highly successful deity simulator Populous, Bullfrog have pushed off in yet another direction by releasing... wait for it... a good old-fashioned platform game!

In Flood, you play a tubby little fellow by the name of Quiffy. He is the last surviving member of the Blobbie race, his comrades having been wiped out by the evil Psycho Teddies and the dread Bulbous-Headed Vong. Life in the caverns is hazardous for a lonely young Blobbie, but it could always be worse... the caverns could get flooded! Ha-ha! This is when the phrase 'famous last words' has a poignant ring...

Cavern religion has long told of 'The Coming of the Taps of Wrath', a fearful time when the old and near-forgotten water demons will begin to fill the caverns with water. It looks like the priests were right — the flooding has begun. This is the last straw for Quiffy, who has decided to get his lil' ol' green butt outta there.

You must fight your way through a series of caverns, battling the dangers of deadly traps and vicious monsters. The exit to each cavern is in the form of a teleporter, which is linked to a 'social conscience' computer. The computer will only allow the portal to open when there is no rubbish lying around, so Quiffy must pick up all the rubbish in the cavern before he can escape.

Occasionally, Quiffy may find a weapon along the way, including dynamite, grenades and a pretty awesome flame-thrower – just right for blitzing those evil trash-scattering Vong! **Maff Evans**



These snails seem to be impervious to the effects of the flood, so a quick grenade lobbed into their midst seems to be in order!



No time to enjoy the ride down - those cans need to be collected.



Let those shuriken fly to blast the creatures out of the caverns.



Aren't boomerangs fun? Right, this one up the left nostril... first go! Bah! Missed! Oh well, back to the acting!

GRAPHICS AND SOUND

As you'd expect from Bullfrog, a lot of care has been put into the game's presentation. The graphics are well drawn and coloured. with a huge dollop of the 'cute' factor that seems to be all the rage at the moment. The sprites have a cartoon-like appearance, but the use of colour and shading gives the characters a solid appearance not usually seen in cutesy games. The sound is equally as impressive, featuring a suitably bubbly soundtrack to introduce the game and a whole host of jovial splishing, ticking, clanking and yelping effects to back the action, which polishes up the whole appearance with Bullfrog's own special brand of digital Mr Sheen.

LASTING INTEREST

The game begins easily enough, but the going starts getting pretty tough around Level Seven, and there are over 30 more still to do! This should keep platform fans wrenching their joysticks around well into the night for weeks. However the game does prove to be rather annoying at times – especially on some levels which require a fair amount of luck to complete – which isn't really a good thing with games of this type.

JUDGEMENT

Producing such an irreverent and jovial game as Flood is quite a brave venture for Bullfrog, but in all fairness they have managed to produce a playable and goodlooking game. Even with its annoying little quirks, there are few straightforward platform games that can manage to keep leap-and-collect fans playing for as long as Flood will keep them captivated. The cute sprites and jolly sound are well up to the standard we'd expect from Bullfrog, but it's doubtful whether the game will have a similar effect on the market to that of Populous. Nevertheless, Flood is one of the best games of its type - it's just that the genre is in some danger of wearing a little thin these days.





You've finished Level One and here you test out one of the new weapons which might just show the guy in the tank (Inset) who's boss around here.

MIDNIGHT RESISTANCE

OCEAN £19.95 ■ Joystick

A family is locked away, frozen behind sheets of glass, so the rescue operation must begin – a do-or-die mission is essential.

Midnight Resistance is a scrolling shoot-em-up, much in the mould of that classic old arcade game Green Beret. Your route is simply to follow the scrolling land-scape, dealing with whatever comes into view by blasting it. Your task is to travel on foot through this strange world of mechanized mayhem, blasting everything in sight and rescuing your enslaved family. Be prepared for anything, what you'll meet next is always unpredictable.



Stand up here and you'll soon be suffering from more than just a splitting head-ache!

As well as soldiers fighting for the enemy, there are round steel blades that crawl across the screen dipping and diving at your head just waiting to turn you into mincemeat. Then there are the big guys, kitted out with steel tanks and a tough guy image, who take a lot of killing. Tanks and planes are common biggies, but there is the odd monster or two as well and getting rid of them can be very tough. A great number of hits are often needed, but with a more powerful weapon you can wipe them from existence quicker.

After each level there is a special weapon screen where you



Concealed behind glass and still wearing her evening dress, your Mother appears on screen.

can buy new weapons. Each one is locked behind a sheet of glass and you have to pay for them with keys collected from dead foes throughout the level.

Weapons available include three-way guns, fire beams, barriers and automatic machine guns, besides the normal rifle that remains with you throughout. Losing a life results in the loss of any special weapons you have, as well as any keys collected. However, the keys are scattered around you as you die and are still there to be re-collected, along with any special weapons you had, if you come back to life.

Team up with a mate and you can increase your firepower and chances of survival with the simultaneous two-player option. The other hero can be distinguished by the different colour of armour he wears, but when you reach the special weapon screen you'll have to share what's available.

Mark Hill

GRAPHICS AND SOUND

The graphics on Midnight
Resistance are well drawn and
give a pretty variation of backgrounds throughout. The wide
range of scenery indoors and out
makes first-time exploration fun
to start with and the graphics
provide an incentive for repeat
playing. A rather dull background
tune and average sound effects
accompany the far more
accomplished graphics.

LASTING INTEREST

The sad thing about this shootem-up is that the gameplay is dated, a bit of a blast from the past. One problem is the limited options available. When you have the same old route to follow every go, the sections you've mastered become repetitive. It does mean, however, that you can learn your way through and each new discovery adds to the excitement.

The main problem is likely to be the frustration level caused by repeatedly dying at the hands of some of the very difficult guardians encountered.

JUDGEMENT

It's a very good game for its genre, but doesn't bring much new to the field except some swish graphics. A good conversion that will certainly appeal to fans of games like *Green Beret* and *Gryzor*, but will leave those in search of originality and variety out in the cold.

GRAPHICS 7
SOUND 5
INTELLECT 2
ADDICTION 6
OVERALL 69%

SHADOW WARRIORS

OCEAN £19.95 ■ Joystick

This is one of the ever-growing band of scrolling beat-em-ups with a Ninja origin. Your task is to fight through six of the toughest neighbourhoods in America.

Using attacking moves you attempt to defeat the ghoulish Assassins that rule the streets and try to become the greatest

Shadow Warrior of them all. Swing kicks and flying neck throws are your only other attacking moves and the ability to live three lives completes your defensive approach.

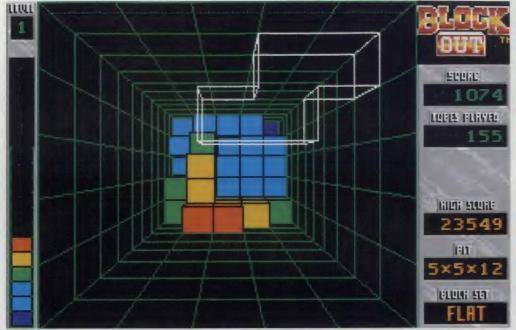
Graphics are colourful and give a realistic effect of a typical suburban neigbourhood, but the



A bit of argy-bargy in the neigbourhood as you send a thug flying.

sprites behave like a horde of drunken zombies – realistic too, perhaps? A simultaneous twoplayer option gives the game a light at the end of the tunnel, but otherwise the action is far too similar to many a fighting game that has gone before. Only recommended for hardened beat-em-up addicts. Mark Hill

GRAPHICS 5 / SOUND 3 / INTELLECT 1 / ADDICTION 2 / OVERALL 42%



Quick! Twirl that block around and fit it in the corner! After all, this is only the easy level with a standard sized well and flat blocks, so you can't let it win for Gawd's sake!

GRAPHICS AND SOUND

Sound in the game is rather minimal, the most noticeable piece being the clasical loading music. Elsewhere in the game sound is used sparingly, providing only the odd effect when a layer is completed. The graphics, although simple, portray the action very well indeed. The clear, colourful displays and smoothly shifting shapes floating down the shaft go together to make a well-presented and good-looking puzzle game.



Just what is needed - a nice cup of tea while the game's paused!

BEOCK OUT RAINBOW ARTS £19.99 Mouse/Keyboard

ith the follow up to *Tetris* arriving in the form of *Welltris* (reviewed elsewhere in these pages), it's not too surprising that similar games should appear. American development company California Dreams have been rather quick off the mark and have come up with their own interpretation of the falling shapes genre with *Block Out*.

The game is based in a square well shape, with falling blocks having to be constructed into patterns on the floor, but this is where the similarity to *Welltris* ends. Instead of the shapes being

flat tiles, *Block Out* contains solid 3D objects which can be rotated in three axes. The idea is to place the shapes in the well to form layers, which when completed are removed from the playing area.

If any gaps in the layer are blocked off from above, then the next, higher layer must be completed before access to the holes can be gained, thus making the going harder. If the blocks mount up filling the well, then the game is ended and you start again.

There are three basic modes of play corresponding to different block sets – Flat, Basic and Extended. The flat set has shapes only one block deep, so it's easy to form them into layers. The Basic set contains more irregular shaes and the Extended set can be of any proportions, making the game particularly tough to crack.

Different game types can be created from an options page, determining the block set to be used, the size and depth of the well and the starting speed of the game. So a massive eight-by-eight well 20 blocks deep with extended blocks piling into the shaft would undoubtedly be rather hair-raising! **Maff Evans**

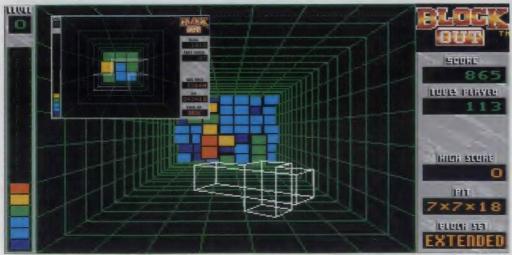
LASTING INTEREST

The action is fairly easy to get into, the only real hassle being the 3D rotation to get the pieces to fit. However the system isn't that complex and soon becomes second nature. As you'd expect the going is pretty compulsive, and even if you do think you've mastered the art of layer building, shifting the options around could add considerably more challenge than you'd expect!

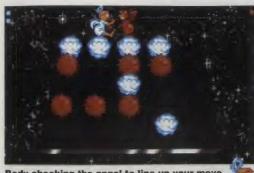
JUDGEMENT

On first sight, Block Out could well be passed off as a Welltris rip-off. This is unfair, since Block Out is a true 3D puzzle game, with the player having to think not only in width and height but also in depth. Don't dismiss the game out of hand! Have a try and you'll see that it has enough of its own character to stand up as a challenging game in its own right and for many people will have more appeal than Welltris.





ABOVE: Look at the depth of that well! It's so far down that you can't see the holes properly. Maybe that's why this game is going so badly. INSET: A narrow well – not recommended for claustrophobic players!







The devil tries to block the angel's diagonal line.

ART OF DREAMS £19.95 II Joystick

mmortality's a drag. Ask any angel: it's all hanging about on clouds, twanging harps and wearing long dresses. One day, though, during a brief respite in the war between good and evil, the cherubs got together with the devils. Between them they created a game to fend off the monotony and they called it Antago.

An Othello/Checkers hybrid, Antago has few rules but bucketloads of strategy. The angel and devil face up across a board, five squares by five. Each takes it in turn to place pieces on the board with the aim of getting five of their own in a row. The angel uses cute clouds, while the devil plays with huge spiked balls.

The players can only reach the very edge of the gameboard, so they are unable to directly affect the pieces in the centre. However, when a new piece is conjured where one already exists, the new ball or cloud forces the present one a square forward, with a knock-on effect down the line.

If there's already five in the row then the last piece is simply pushed off the board into oblivion.

Subtlety and cunning are required as lines are manoeuvred to create a winning row (any row of five will do). When the board clogs up with red and white blobs, the skill of disguising your potential line becomes increasingly important: with just one piece, you try to bump the balls to produce a winning line from nowhere. The one rule is that you can't knock the last piece placed by your opponent into the void. It can be moved, but not destroyed.

Trenton Webb



It's tit-for-tat as the two players keep blocking each other's lines.

GRAPHICS AND SOUND

Antago is cute. The Angel sports a night-shirt and halo, the devil a pot-belly and horns. Floating around the board they bodycheck each other mercilessly out of the way. They even drop subtle hints about the speed of play, filing their nails, looking bored or reading hymn sheets between slow moves. These caricature sprites are juxtaposed with swirling surreal backgrounds and backed up with an eerily atmospheric theme tune, making Antago an instantly attractive game.

LASTING INTEREST

Playing against the machine. interest can be sustained with a batch of pre-generated boards. These add extra conundrums and complications. The game's real charm, though, lies in oneon-one contests against a friend, when it's a head-to-head, knivesdrawn, back-stabbing fight.

JUDGEMENT

Undeniably cute and instantly playable, Antago's destined to be an occasional game rather than a lasting passion. Even its twee characters and wild backgrounds cannot compensate for the lack of long-term solo appeal. In oneon-one mode it's great, but alone even the horde of preconfigured boards can't sustain longterm interest.

GRAPHICS SOUND INTELLECT ADDICTION 6 OVERALL 65%

ARC £19.99 JOYSTICK

The Thaalians were an ancient race that over the years developed machines and robots to androids rebelled the Thaalians own creations. The robots constructed a great pyramid of six was the crystal of Thaal which held the knowledge of the entire Thaalian civilisation.

As Max Danger, intrepid

all six levels to reach the crystal of Thaal and to learn of its touch the touchstone which you will find in each – once you have touched every touchstone on the level you will progress to the next.

collect handy objects such as spells which act as smart as bonus objects which do naff all except boost up your score.



The graphics are a bit limited and show little detail but the whole thing slows down noticeobjects are moving about on screen. Sound is narrowed

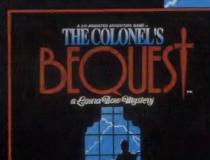
down to an anoying little title Overall, gameplay is spoilt by the lack of sound during play too great a task. Jason Edgell

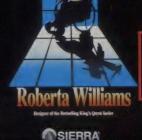
GRAPHICS 5 / SOUND 4 / INTELLECT 4 / ADDICTION 5 / OVERALL 52%



DYNAMICTHRILLERS & ADVENTURES ALL THE WA

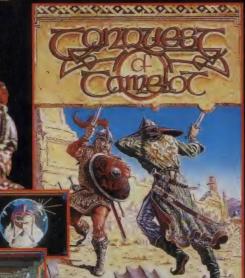








REILEACES





Available for your PC, Atari ST & Amiga at all leading computer shops or by mail order.



Mail Order: Intermediates Ltd. P.O. Box 847, Harlow CM21 9PH Tel: (0279) 600197



Sierra Consumer Hotline: (0734) 310003





SUPERB BEAST II 'T' SHIRT ENCLOSED

An Original, Unique Roger Dean Design

THE BEAST IS BACK!

THE SEQUEL TO THE TOP SELLING AMIGA GAME OF 1989

THE CONFLICT CONTINUES .

Your deadly struggle for freedom against the dark forces of the Beast Lord is now but a painful memory. You try to forget the anguish of the past by concentrating on your prize for success in the bloody battle: the return of your humanoid body.

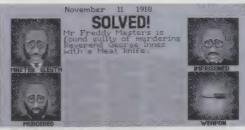
But as you slowly adjust to your newly-won physique, the pain you thought gone is about to return . . . The Beast Mage has kidnapped your sister! She must be rescued before she falls foul of his dark arts. You journey to a hostile alien world to face the malevolent hosts of the Beast Mage and interact with more friendly characters to learn of your unfamiliar surroundings.

You must fight your way through many enemy-infested levels collecting and using weapons and objects to aid your crusade towards confict with the Beast Mage... before he makes your sister his own!

Screen Shots from the Amiga version

SEEING IS BELIEVING





The tabloids announce the crime and its solution with their cusomary restraint and tact.

US GOLD £24.99 ■ Mouse



urder's been committed. It will be two hours before Scotland Yard's flat-foots arrive at the old country house, so as Britain's greatest detective you've the chance to catch the criminal

and claim the fame.

Murder's the name and crime's your game. The tabloids announce your arrival at the scene and then it's time for some clue sniffing. Using questions, fingerprinting and the faithful old notebook you must find the murder weapon, identify the culprit and book 'em Danno (Murder One).

halls and rooms must be searched for clues. Using a mouse either to dictate direction or to act as a magnifying glass for close-up inspection of people or objects, the trench-coated sleuth is off on the trail. For in-depth grilling of suspects, slap the eye-glass over

The isometric 3D mansion's



What was Margo King doing with the ashtray in the bedroom?

a suspect and hit the 'question' icon. Using a number of variables you can ask suspects about themothers, relationships, selves. objects and places. If the right person's asked the right thing it should eventually become apparent who topped who and with what. Of course you can't be expected to remember twenty different versions of the same story, so with a crafty click on the notebook you jot it down.

All entries in the book are cross-referenced as they're made. So if you discover that Mister Bates was arguing with the victim in the hallway, shortly after picking up the bread knife, then the info's stored under clues and people.

The other major source of clues is fingerprints. In time-honoured fashion the sleuth can dust anything he sees lying around for 'dabs'. If the victim was stabbed,

Better check the floorplan to save to time and shoe-leather.

getting prints off the four knives is a priority, but other 'unconnected' objects may hold the key to the mystery. Identifying the prints requires use of the comparison chart, where all the fingerprints you take during one game are logged. This often leads to great amounts of chasing people round, waiting for them to put an object down so you can dust it.

Once you've established who did what, it's time to grab hold of exhibit 'A.' click on the cuffs and wait. If you're successful then a banner tabloid headline proclaims you as the greatest living detective since Miss Marple traded in her zimmer. Fail and you're ridiculed, without a clue as to whether you had the right person and the wrong weapon, wrong person and right weapon or if you were just totally and utterly wrong.

Trenton Webb

Look in your notebook to review the clues you've collected so far.

GRAPHICS AND SOUND

Starting with a scream, Murder sounds promising, yet there are few effects. Taps drip and gravel paths grate, neither hindering or helping the game. The blackand-white isometric 3D screens help capture the murder mystery atmosphere beautifully.

The objects are easily visible, but all the suspects look identical, repeats of the same stock types - butlers, maids, flapper dress or dinner-jacket. The side-screen graphics make up for this with identikit faces, enlarged finger prints, and the 'hand-written' notebook.

LASTING INTEREST

With a different murder to solve every single day for over 30 years and four skill levels amateur to supersleuth - there's plenty to keep you busy. The harder levels simply mean bigger rooms, more suspects and increasingly complex plots. Finding the enthusiasm to solve these crimes may be a problem, though. It's fun announcing 'whodunnit' but detection requires dogged questioning and isn't the glossy glamour job that messers Magnum and Lansbury make out on TV. Saying the same thing to thirty different suspects gets tiring. The determined will love it. but for others the novelty of getting the butler banged up for 25 years will wear off after a few murders (he wrote).

JUDGEMENT

A puzzle game with a real difference, Murder blends the genre of the adventure, where precise questions elicit the best answers, and arcade-style games where speed is important. It's not just the two-hour time limit, but getting to objects before the prints are wiped by that swine with the hanky.

Murder needs intuition and a nose for a lie if you're to solve the crime and claim the glory. When that fails you can fall back on methodical police work, quizzing everyone, dusting everything and guessing. Murder taxes the mind and patience, but if you want to commit them rather than solve them an action game might be a better idea.

GRAPHICS SOUND INTELLECT ADDICTION OVERALL 81%



Not so much a football game as a football sim. Everything's seen from the stands, as the realistic players head, tackle and slide for glory. Even the set piece moves are under your guidance, so express yourself.

EMLYN HUGHES INTERNATIONAL SOCCER

AUDIOGENIC £24.95 ■ Joystick/Mouse

This soccer game has already spent a few weeks bobbing about above the murky depths of the Amiga charts which, one presumes, has less to do with the somewhat dubious licence than with the quality of the game itself.

It's simple enough. The idea is to pick the best players from the squad, give them the benefit of your tactical prowess and, with adept joystick waggling, stuff some opposition. While it is pitched as a mish-mash of tactics and action the most appealing aspects of the game will tax the reflexes and subtlety of movement rather than any heavy duty teasing of grey matter.

There are more options than you'll ever find useful – you decide how long matches are, whether to play auto-goalie (a good idea at first) and other such domesticities.

Let's say, just for the hell of it, that you fancy running the England show. You're presented with the opportunity to practice with some friendlies, or enter a cup and league competition with classy opposition. The players have the kind of bland names one expects but it doesn't take long to change the likes of Green and Jones into Gascoigne and Lineker. The names of international opposition are inane enough (Cousteau and Bleriot play for France) to merit being left alone.

Each player has various attributes indicated on an extremely simple table and you can manipulate these to suit any requirements. Once all this fuss is over you can get down to some real fun. Everyone knows that a good game is simple to play and difficult to master. Emlyn Hughes

starts off with the right idea. It doesn't take long to learn how to win the ball and distribute it. Scoring, and therefore beating the opposition, is a wholly different ball game.

Tricky joystick manipulation will give you the power to put the ball any place you please, but these skills need time and practice to be developed. The way to win is to get the measure of the pitch and work from there. The players will do the rest, at your command.

Unlike so many soccer games the offside rule has been included and it seems impossible to find players in an offending position.

No doubt everyone who brings this home will have a good fiddle with the match options. But the game is essentially a knock about, and a jolly good one at that.

Colin Campbell

GRAPHICS AND SOUND

You can sense that this game has graduated from the 8-bits – the visuals are 'functional'. Players, while a tad stiff, do not suffer chronic arthritis. The crowd sound is cheerful and wonderful so despite being merely a random bag of muffled crowd cheers, beeping horns and unintelligible chants, it adds to the atmosphere and should be turned up. But kill the music at the earliest opportunity.



Pick that squad, then alter their abilities to give you max power.

LASTING INTEREST

Definitely one of the more durable footie games mainly because of its wide range of shots and passes. Victory over all the computer opponents will take time and there are enough surprises to make it a good wheeze for two players.

JUDGEMENT

It lacks speed, tactical difficulties are virtually non-existent and shouldn't be taken too seriously, but nevertheless it's a lot more fun than a Saturday afternoon at Wycombe Wanderers.

GRAPHICS	6
SOUND	6
INTELLECT	3
ADDICTION	8
OVERALL	78%

EVERTON FC INTELLIGENSIA

AMFAS £19.95 ■ Joystick/Mouse

A straightforward soccer quiz with a format based loosely on the FA Cup. Choose a team, find out who the opposition is and try to win by correctly answering more questions than you goof on. If you are drawn at home against the likes of Tranmere Rovers then there are only a few questions to answer. However, a trip to Old Trafford in the quarter finals is for real football trivia nuts.

The questions are multiple choice with three possible

answers. Most are straightforward text affairs along the lines of "What was the name of the dog who found the World Cup when it went missing?" There are a few picture questions, usually "Who is this?", the answer mostly being Carlos Valderama or Andy Roxburgh – try not to mix them up.

The designers have dispensed with pretty images so in the visuals department, this is a pretty dismal offering. It's just a quiz game and doesn't

pretend to be anything else. Unfortunately, despite the obvious attraction of obscure soccer facts, there is little to whet the appetite. Sadly so many of the

teasers are nothing of the sort and if you don't know who won the Littlewoods Cup in 1988 a process of elimination will put you in good stead. There's also



Get it right and the ball moves into scoring range.

chronic repetition of questions. There are nearly 1,700 – but who wants to answer 50 of them 300 times before we see them all? Colin Campbell

GRAPHICS 2 / SOUND 3 / INTELLECT 5 / ADDICTION 5 / OVERALL 53%





THE BEST JUST GOT BETTER!

Mission Disk 2 takes the best simulation of daylight dogfighting into the world of radar intercepts and beyond visual range weapons.

Friendly ground forces need your help. Not only do you have to stop the enemy tank onslaught, you also have to protect your own forces and vital installations from enemy raids.

Messages from ground control will allow you to assess the overall tactical situation.

Will you have to scrub your strike mission and go after the enemy bombers? Keep an eye out for the possible fighter escort. You may have to cope with two incoming raids simultaneously and up to five enemy aircraft in the air at once!

NEW FEATURES INCLUDE:

SUPERLATIVE "FALCON"
GAMEPLAY WITH
ENHANCED CHOICE OF
WEAPONS.

USING GROUND CONTROL AND RADAR.

BEYOND VISUAL RANGE AND ANTI-RADAR MISSILES.

FULLY DYNAMIC BATTLEFIELD WITH ENEMY ARTIFICIAL INTELLIGENCE.

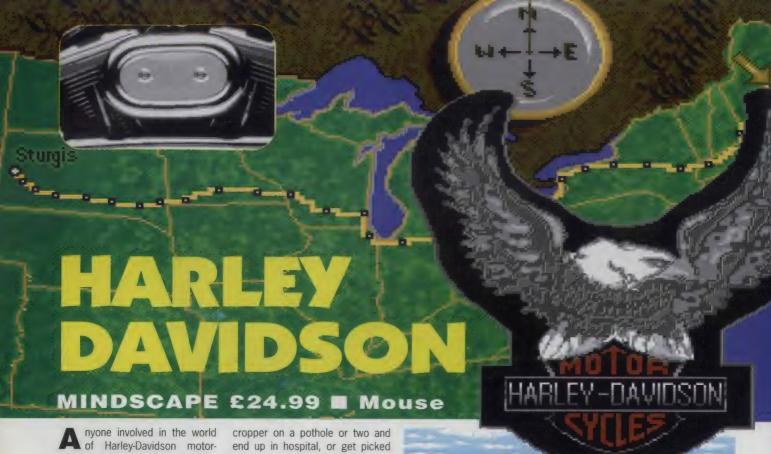
AIRCRAFT IN TWO INDEPENDENT ATTACKS AT ONCE.



Spectrum HoloByte

Market Mar

 1990 Mirrorsoft Ltd. Irwin House, 118 Southwark Street London SE1 OSW. Tel; 071-928 1454



nyone involved in the world of Harley-Davidson motorcycles will undoubtedly be familiar with the biker rally in Sturgis, South Dakota. Like the Beetle owners' 'Bug Jam', the Sturgis rally is the place to be once a year for riders of these much-revered two-wheeled machines.

In Mindscape's licence, you play a rider based in Maine who only has ten days to reach Sturgis. Belting down the highway at full pelt is not the way to do it, though – this way you will either come a

cropper on a pothole or two and end up in hospital, or get picked up by the police for speeding! A couple of bad things that it is best to make sure you avoid.

There are regular stops on the way that will allow you to buy some extra kit for your bike, some clothes or even have a tattoo. If you feel up to it, you can take part in a special event. Take care on the way, be a helpful soul and pick up hitch-hikers if you want, but get to Sturgis on time – the festivities are waiting! **Maff Evans**



Pull into the bike shop when you hit a town to stock up on fuel and anything else that you may need to keep runnin' free.



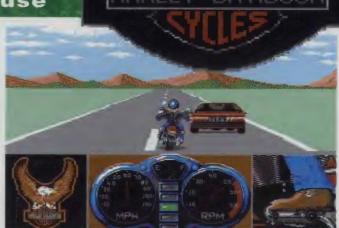
Burning off down the strip in a most impressive fashion.



Picking up hitchers is a good way of making new friends.



It's nice to meet a friendly face in the stop-offs of a long journey.



There isn't much time for sightseeing, so pull past those annoyingly slow drivers and hit the open road ahead.

GRAPHICS AND SOUND

The presentation of *Harley-Davidson* is pretty nifty, with some nice digitised pics and location shots, but the actual road sections are not that exciting. The perspective 3D road effect is fair enough, but the sprites are a little limited and are only adequately animated. The sound, too, is a shade weak and could do with perking up.

LASTING INTEREST

Even though there is a long way to go and the events are fun, the actual road-driving that takes up most of the game is pretty repetitive and uninspiring. The feel of a trek on the open road astride a powerful machine doesn't quite reach its full potential and could bore casual bike fans after only a couple of days.

JUDGEMENT

The chance to ride a classic bike across the United States is a romantic and appealing thought, isn't it? Unfortunately, despite its slick presentation and humour (using biker slang at every opportunity), *The Road to Sturg* is hardly captures the feel at all. What we have is a basic 3D driving game that has a few extra elements thrown in. The special

events are worth playing for, and maybe just to dream of doing the run to Sturgis for real will attract some gamers, but ultimately, most Harley fans will find themselves unfulfilled, end up ignoring the conversion and stick to the open road with the real thing.

GRAPHICS	7
SOUND	4
INTELLECT	3
ADDICTION	5
OVERALL	67%

The game of the film!

Hardees



M

For further information on Mindscape products and your local dealer, contact: The Coach House, Hooklands Estate, Scaynes Hill, West Sussex RH17 7NG. Tel. (044 486) 761





T H E A C T I O N G A M E



TAKE CONTROL

OF BOONE AS

HE MAKES HIS

WAY THROUGH

THE DEPTHS AND

CAVERNS OF

NECROPOLIS TO

FIAS

THE UNDERGROUND
CITY OF MIDIAN
WHERE DWELL THE
NIGHTBREED.
SUPERNATURAL
CREATURES WHO
HAVE SHIELDED

THEMSELVES FROM



THE INHUMANITIES
OF MAN.
NOT ONLY MUST
YOU CONFRONT
AND DEFEAT THESE

AVAILABLE FOR COMMODORE
SPECTRUM - AMSTRAG



1989 MORGAN CREEK PRODUCTIONS

OCEON

YOU MUST PIT YOURSELF AGAINST THE MURDEROUS REDNECK GANG FROM THE NEARBY ABOVE-GROUND CITY AND ULTIMATELY DEFEAT THE INSANE SERIAL KILLER KNOWN AS

"THE MASK"



BDEUN

THIS ALL-ACTION ARCADE ADVENTURE ALLOW YOU TO SHOOT, PUNCH AND JUMP AS YOU EXPLORE THE TERRIFYING UNDERGROUND ENVIRONMENT OF THE NIGHTBREED.

COMUNG SOON!!!

GREMLIN £19.99 **I** Joystick/Keyboard

here's been a garage full of racing sims over the past year. So one has to be either very special or different to merit a second look. Combo Racer's claim to fame is simultaneous two player action, with rider and passenger working together for speed.

Combo Racer has all the elements that a strong racing title requires. It offers a variety of courses for seasons of high speed action, and gives you the chance to try something outrageously daft at no personal risk. It even comes with a course designer to help out in the lasting interest stakes.

Controlled by joystick in the traditional manner (up to accelerate, back to brake etc) Combo Racer is easy to get to grips with. Precise changes of direction, speed and gears are required to even qualify, let alone race. The opposition's good enough to leave crash victims for dead and even the very best must struggle to win, while the undulating tracks, complete with tunnels, are varied enough to test a riders ability.

What makes Combo Racer different is the two player mode, which allows racing in pairs. In a



The course designer allows you to create your own racing nightmare (top left). When racing though it's staying on the road that is important: one slip of line, corner too fast, or have a badly positioned passenger and a crash (top right) is the only possible result.

one man game the computer takes care of the passenger's fiddly bits - shifting their weight to give the bike greater traction. In two player mode one person takes the handle bars, the other dons a helmet and controls the passenger. He plays a vital role because if he's not perfectly positioned a

terminal flip out's all too probable. Crashing costs time and loss of face. In Combo Racer it also affects the bike's performance. Each collision costs 3% engine damage, and after a few shunts you soon lose the title of Racer and start looking at a funky Combo Moped, Trenton Webb

GRAPHICS AND SOUND

Speed's the soul of any racing sim and Combo Racer moves with eye-numbing rapidity. Corners loom with frightening suddenness, a factor complicated by the dips and rises on each course. The bike responds well, hanging on line if controlled properly, but dishing out big penalties in the form of crashes to the careless. Soundwise the game lacks convincing effects, with a simple engine sound and a tolerable intro theme.

LASTING INTEREST

The big plus points should be the track designer and the two player mode. The course creator breathes life into it, but only for people who find racing itself inexhaustibly entertaining. The two player option is disappointing, with the passenger's involvement limited to corners. Even there it's simply a matter of pushing the stick to one side not scintillating gameplay.

JUDGEMENT

A first-class racing sim, but Combo Racer lacks the magical spark of a classic. The course designer will only interest diehard bikers, while two-player games are too limited to be of consequence. Combo Racer is a commendable entry in a packed field, but lacks the poke to take pole position.

GRAPHICS	7
SOUND	2
INTELLECT	2
ADDICTION	6
OVERALL	69%

MD PRODUCTION £TBA Mouse

The word Green now has two meanings: naivety or environmental concern. A fact that has to borne in mind when playing Wildlife. In this photo safari, your job's to take interesting pics of animals and shoot a few poachers. After selecting one of four continents and being told which three animals to snap, you're whisked off to the country in question. Use the icons to grab then use two lenses and a rifle to complete the assignment. horizontally across from right to left poachers and animals pop up. You select either the camera or rifle, place the cursor over the target and start shooting. Occasionally there's medi-kits, to heal damage the poachers' bullets have done to you, and more film to grab.

Wildlife has a whole flock albatrosses hanging about its neck. The game style itself is unoriginal, following in the



There's only one way to deal with poachers - shoot 'em.

same tracks as Safari Gubs (sorry, Guns) but lacking the involved gameplay, all you need is a quick mouse hand and it's game over. Finally and

most importantly the game's very pretty, but there's no addictive hook. Essentially Op Wolf without gameplay or graphics, so you'd have to be very green indeed to find Wildlife appealing. **Trenton Webb**

s the Iron Curtain finally comes down on the Cold War, out from the deeps of mid-Eighties Reagenesque jingoism sails Red Storm Rising. Based on the techno-thriller by Tom Clancy and Larry Bond, this simulation pits the best of the Russian and US navies against each other in a fight to the finish.

In a game based over four different time zones, commanders can fight battles beneath the sea any time from 1984 to a factitious future where new developments in weapons technology make death-dealing easy. As an American nuclear submarine commander, your job is to sink Ruskie freighters, carriers, destroyers and subs who, not surprisingly, want to do the same to you.

Commanders have a selection of screens to watch as they prey beneath the seas, with cursory shots of sinking ships thrown in for good measure. The skill comes not only from being in the right place to strike, but also from accessing the correct charts and weapons to be effective. The main game's viewed on a tactical map and so subs and ships are only seen as blips on a radar screen.

There's masses of other information a budding Cap'n Nemo must take into account while sailing. Many things make the art of detecting enemy shipping without being detected yourself difficult. Thermal ducts in the water can mask or distort sonar, while certain bits of nautical kit function better at different depths and speeds. Acoustic signatures can be compared to identify a ship class, while the detection levels can be watched, letting you know just how sly you've been.

These toys for the boys would be incomplete without weaponry. It's here that *RSR* metamorphosises from a diverting undersea drive into a true game. Torpedoes have manifold abilities, and can be fired undetectably and unjammably on wire, or can hunt ships on their own with sonar in preset left or right search patterns.

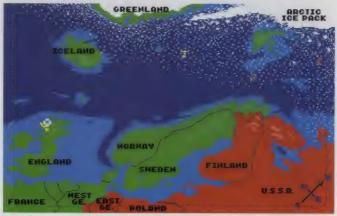


Mission complete, and it's time for medals and back-slapping.



RED STORM

MICROPROSE £24.99 ■ MOUSE AND KEYBOARD



The war map, hunting ground for nuclear submarines of each and every persuasion. Will you be the hunter or the prey, though?

Missiles can be launched at shallower depths, but make you rather obvious. You need to know which defence systems which ships pack, because it's stupid to give away the element of surprise with a weapon that will not sink the opposition. Once they realise you're about it's kill or be killed.

The action is largely key controlled, so the MicroProse standard 'punch out chart' is essential. As the hunt takes shape decisions have to be instantaneous and correct. It's the thrill of the chase, the sudden strike from the deep followed by a charge for the welcoming anonymity of the ocean. In the middle of a battle the quick reference chart can save

your life, when a reload's needed and you can't remember the key stroke sequence. This speed of action contrasts with the authentic, but terrifying, slowness of the 7,000-ton beast you control.

Simultaneous reading and playing is never a totally enjoyable experience, but it's vital if you're to weather the storm. The list of variables is truly immense, but there are a few manouevres that must be learnt – skills which the practice options are designed to build. Once armed with experience it's time to start out on single raids and eventually go for the big one, the Red Storm campaign – the Russian hordes en masse.

Trenton Webb

GRAPHICS AND SOUND

RSR is an odd simulation, because there's no 'cockpit view' – only maps, charts and the virtually useless periscope. This lack of the 'being there' sensation doesn't detract from the excitement. When the torps start scraping the paint from your ship, palms perspire and tempers fray. Zooming in and out of the tactical map, commanders must make the right call at the right moment. Lives – your crew's and your nation's – depend on success.

As with any game where there's a 'run silent' option, the sounds of RSR are no great shakes. The prop chugs away in the background, but little else. Even when a direct hit's scored and you watch mighty warships sink beneath the waves, there's no fury from graphics or sound. Explicit violence is not the reason you persevere with RSR.

LASTING INTEREST

Controlling a nuclear sub takes skill and practice. Add this to the challenge of a full-blown war, the outcome of which your actions actually affect (the game doesn't slavishly follow the book – the scenario starts with the same premise but changes as you sink more shipping) and RSR has



RISING



The crew report a sonar contact. Track it, identify it and kill it. Use any of the weapons available, just as long as it works.

massive potential in the staying-power stakes. The lack of stunning graphics will inhibit the short-term player who wants to see large vessels flying through undersea trenches, but not the long-term strategist or war techie. They'll relish the test of continual battle with a diminishing supply of weapons, attacking more dangerous targets with an increasingly damaged boat.

JUDGEMENT

In RSR valour is banished to the brig: cold-headed actions and cool nerves see you through. It brings the complexities of modern sub war to the small screen with polish and finesse, if not graphic greatness. RSR is complex enough to challenge, yet structured to allow the player greater freedom as skill develops. Get too cocky, by jumping in at the deep end on ultimate difficulty level, and your next port of call is Locker 3F, Jones D. Develop your sub skills, though, and you could blast the pride of the Russian navy into scrap, unseen and safe.

GRAPHICS 4
SOUND 1
INTELLECT 10
ADDICTION 8
OVERALL 89%



The main playing screen is the tactical display. From here you must guide the sub to naval victory or at least survival.



The sea is not always cruel. Using the thermal properties of the ocean it can help disguise your presence.



Controlling your torpedoes on wire, they can sneak up on enemy shipping undetected giving you a chance to escape.



As your torp heads off after a ship using its own sonar, commanders must dodge the incoming enemy fire.



The quest begins with a none-too-complimentary analysis of your quarry. At the police station you must gather all available information: other detectives may know something vital that could blow the case open. You'll also need to gather a certain amount of hardware, such as your gun and 'cuffs.

POLICE QUEST2

SIERRA ON-LINE / ACTIVISION £34.95 Keyboard /Joystick / Mouse

police Quest 2 revolves around being a police officer at work: detective Sonny Bonds, on the homicide squad in the fictional American town of Lytton. No choosing skills for a personalised character — Bonds likes his job and he isn't going to change.

Arriving at the police station one morning, you receive a note about a retrial for Jessie Bains. Bains is the "Death Angel", a murderer with whom Bonds has crossed swords before — what do you think *Police Quest* was about? A few minutes later, urgent news is flashed to you. Bains has escaped and he has a hostage — what now?

What you don't do is leap into a patrol car and drive to the crime scene. Such positive action lands you in trouble. This is a "true to life tale of high police adventure", as the box proudly proclaims, written by an American ex-policeman called Jim Walls!

First of all you have to get the paperwork sorted out. Don't worry about that hostage – he's been dead for hours. Believe it or not, the entire police station has the same attitude towards the public good as the very responsible guy who designed Chernobyl.

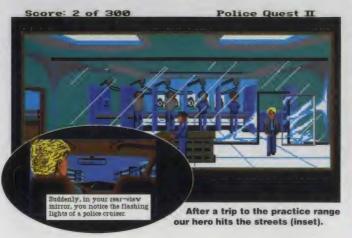
Asking your captain for help doesn't do a lot of good either. He's exactly the stereotype you see on every American cop show: angry, busy and short on friendly words. Well, not exactly all that busy. He gets through an awful lot of ice lollies and telephone calls and then he turns round and tells you to get on with the job.

This is how a real police officer behaves? The USA does have a very high crime rate, especially murder, but Lytton's law enforcement community just doesn't care. If this is a "true to life tale of high police adventure"

I'll take something like South American Death Squad Simulator any time – I bet they'd show more concern and compassion for their fellow man.

I'd love to know what to do next on the administrative side but I haven't a clue. You just don't find that sort of thing out from Dirty Harry films. How do you get further? Well, you can spend hours just trying to get ten minutes into the game. Playing *Police Squad 2* can be as predictable as the forms you get to fill before you have the chance to get the cuffs out.

Pat McDonald



GRAPHICS AND SOUND

It's a pretty game and no mistake – better looking than Hero's Quest. When you adjust the sights on your gun you couldn't ask for a clearer picture of what's going on. Driving around Lytton is a bit tedious as it all looks the same. The speed at which the graphics move puts me in mind of a Citroen 2CV – it gets there but it takes time. Audiowise there isn't a lot. I was promised a 30 minute original stereo theme tune... somewhere.

LASTING INTEREST

This game will have you running around the ceiling in frustration. It's a three-disk game and there's whole a lot of accessing going on. This sort of one-solution puzzle can become highly irritating and, as such, is not recommended for the beginner. You can't so much cut your teeth on this game as blunt your chainsaw blade a bit. It's very, very difficult indeed.



A policeman's locker's not a happy one (happy one), but the decoration helps lift the mood.

JUDGEMENT

Police Quest 2 can make you livid. After spending a good few hours getting totally fed up it's all too possible to want to blow away your captain in frustration. This costs your badge and leaves you still far from solving the Jessie Bain's Case.

If you think you could be a real American police officer, then go for it. The game is good EXCEPT that it requires an immense effort to play. When I play a computer game I expect progress not blood, sweat and tears. Some will find emulating the job of a modern American tec enthralling, but most will find it far too realistic – with its heavy procedural bias – reminding them of a hard day at the office. Not the ideal way to relax after after a hard day at the office.

GRAPHICS 7
SOUND 4
INTELLECT 8
ADDICTION 3
OVERALL 69%

0742 424230



STATE OF THE ART



0742 424230

Amiga A500

Every Amiga sold includes: WorkBench 1.3, extra disk, tutorial disk all with manuals, full one year warranty, mouse; free TV modulator and cables

£340 inc

Amiga Packs

Batman. Batman the Movie, New Zealand Story, F18 Interceptor and Deluxe Paint II £355 inc

Flight of Fantasy

F29 Retaliator, Rainbow Islands, Deluxe Paint II, Escape From The £358 inc Robot Monsters

2nd Drives

Enable/Disable Switch Cumana £79 inc CAX354

Hard Drive

A590 20Mb HD with room for 2Mb £365 inc of RAM

RAM Upgrade

0.5Mb Expansion enable/disable switch plus £5 for clock £55 inc

3.5" Unbranded Disks

DD 100% Certified Labels & Postage

52p each 10 to 50 49p each 50 plus

45p each 120 plus 42p each 500 plus

The second second	
5th Gear	£8
688 Attack Sub	£17.
A.P.B.	
Action Fighter	£17
Adidas Champ Football	£17
Airborne Ranger	£16
Altered Beast	.£11.
Antheads (Data Disk)	£12
Aquanaut	£17
Baal	£9
Bad Company	£16
Balance Of Power 1990	£17
Barbarian 2 (Psygnosis)	
Bards Tale	£8
Bards Tale	£17
Batman The Movie	£17
Battle Valley	£5
Beach Volley	£11
Black Tiger	
Blasteroids	
Blood Money	£11
Bloodwych	
Bloodwych Data Disk	£7
Blue Angels	
Bomber	
Bomber (Data Disk)	£13
Budokan	
Captain Blood	£4
Cartoon Capers	
Castlemaster	£17
Chaos Strikes Back	£17
Chase HQ	
Chronoquest	
Cloud Kingdoms	
Colorado	
Conqueror	
Continental Circuit	
Crack Down	
Crazy Cars 2	£17
Cyberball	
Damocles	
Dan Dare 3	£14
Defenders Of The Earth	£11
Dragon Force	
Dragons Breath	£17
Dragons Lair (1Mb)	£26
Dragons Of Flame	
Dungeon Master (1Mb)	£16
Dangeon roater (mo)	014

IIIIIOO 3 GUEST	LIO.77	Kall IOOVV ISIAI IOS
First Contact	.£16.99	Reach For The Stars
Flood	£17.50	Resolution 101
Future Wars	£17.95	Return To Atlantis
Ghost Busters 2	£16.99	Risk
Gold Of Americas	£17.99	Robocop
Grand National	.£16.99	Rocket Ranger
Gravity	.£17.75	Roger Rabbit
Gunship		Rotox
Hammerfist	£17.75	
Hard Drivin	£11.95	RVF Honda Seven Gates Of Jami
Heavy Metal		
Hero's Quest	£00 00	Shadow Of The Beas
Hillsfar		Shadow Warriors
Hot Rod		Sim City
mperium		Sim City Editor
nfestation		Skidz
nterphase		Space Ace
ron lord		Space Rouge
t Came From The Desert (1 Meg)		Speedball
		Star Trek V
vanhoe		Steel
Jack Nicklaus	£17.25	Strider
Jack Nicklaus Courses	£10.99	Stunt Car Racer
Jumping Jackson		Super Cars
Keef The Thief		Switch Blade
Cick Off	£11.99	Swords Of Twilight
Cick Off Extra Time		
Kick Off 2		Test Drive 2
Kid Gloves		TD2-Supercars
Clax	£15.99	TD2-Musclecars
Knight Force	£17.25	TD2-California
Knights Of Crystallion	.£21.99	The Cycles
Crystal	£13.99	Their Finest Hour
Kult	.£16.99	Theme Park Mystery .
laser Squad	£9.99	Third Courier
ast Ninja 2	£17.25	Time & Magic
iverpool		Tower of Babel
ords Of The Rising Sun	£14.95	Triad 2
ost Dutchman's Mine	.£17.99	Triad 3
ost Patrol		Turbo Outrun
Wagnum 4		Turrican
Wanchester Utd	£17.95	TV Sports Basketball
Microprose Soccer	£16 99	TV Sports Football
Midwinter	£17.99	Ultima V
Might And Magic 9	£91 99	UMS II
Millenium 2.2		Untouchables
Moonwalker		
Vinja Spirit	£16.05	Vindicators
Vinja Warriors	£16.00	Warhead
North and South	£17.05	Weird Dreams
Nuclear War	£17.00	World Cup Soccer 9
Operation Thunderbolt		World Cup Soccer 9
247 Thunderbolt		X-Out
Pinball Magic		Xenomorph
		Xenophobe
Pipemania		Xenon 2
Pirates	L10.50	Xybots
Pools Of Radiance		Zak McKraken
Powerdrift	£10.99	Zombi
Projectyle	L17.50	

Rainbow Islands	£16.99
Reach For The Stars	£16.99
Resolution 101	£16.99
Return To Atlantis	€17.50
Risk	£14 75
Robocop	£17.50
Seven Gates Of Jambaja	£8.00
Shadow Of The React	617.00
Switch Blade	£14.99
Xenophobe	£7.99
Zombi	£17.25
	Rainbow Islands Reach For The Stars Reach For The Stars Resolution 101 Return To Atlantis Risk Roboccop Rocket Ranger Roger Rabbit Rocket Ranger Roger Rabbit Rotox Seven Gates Of Jambaia Shadow Of The Beast Shadow Warnors Sim City Six City Space Ace Space Ace Space Rouge Spaceball Stat Trek V Steel Strider Stunt Car Racer Super Cars Switch Blade Swords Of Twilight Test Drive 2 TD2-Musclears TD2-California The Cycles Their Finest Hour Theme Park Mystery Third Courier Time & Magic Tower of Babel Tinad 9 Turbo Outrum Turrican TV Sports Rototal Ultima V UMS II UMS II UMS II Untouchables Windic Lop Soccer 90 X-Out X-Enongoph

Joysticks & Other Bits

Multi Coloured Cruiser	
Quickjoy II Turbo	£7.99
Quickiov III Supercharger	£11 99
Quickjoy Superboard	£15.00
Competition Pro Extra-Clear	C10.0F
Star LC10 Printer	
Star LC 10 Printer	£159.99
Star LC10 Colour Printer	£201.00
ART & VIDEO	
Animagic	£66.99
Comic Setter	£39.99
Deluxe Paint 3	£40 00
Deluxe Photolab.	£54.50
Deluxe Print 2	
Deluxe Video 3	
Deluxe video 3	£09.99
Digipaint 3 Digiview Gold V4.0	£54.50
Digiview Gold V4.0	£119.00
Movie Setter	£39.99
Pageflipper + F/X	£81.00
Pixmate	£30 00
Pro Video Plus	£169.00
Turbo Silver	£00.00
TV *Show 2	
TV *Text Pal	CEO 00
TV TEXT POIL	£39.99
TV *Text Professional	£89.99
Video Titler	
Vidi Amiga	£89.99
DTP, WORD PROCESSORS AND BUSINESS SOF	TWARE
Excellence	£129.95
Kindwords V2.0	£39 99
Maxiplan Plus	
Maxiplan	
Pen Pal	
Professional Page V1.3	C140.00
Protext V4.Ω	
Prowrite V2.5	£69.99
Publishers Choice	
Scribble Platinum	£39.99
Superbase 2	£59.99
Superbase Professional V3	£159 00
The Works Platinum	
Transcript	
Word Perfect V4.1	C1E0.00
WOIG FEIIECT V4.1	£139.00

Free entry to the Amiga club with every purchase. Phone for details.

Unreleased titles will be sent within 24hrs of release date

TO ORDER SEND POSTAL ORDER OR CHECKE TO

FREEPOST STATE OF THE ART 25 NORWOOD AVE SHEFFIELD, S5 OQH

LATEST DESIGN INCORPORATES 'CHIPMEN' OPTION AT NO EXTRA COST!

- Increases computer memory from normal 1/2 megabyte to 1 megabyte
- Includes disable switch/incorporates high quality silver coated pin connector
- 16 bit technology
- Fit in minutes
- Direct replacement of Commodore A501 expansion
- Includes "CHIPMEM OPTION" Phone for details
- 12 month warranty
- In stock now!

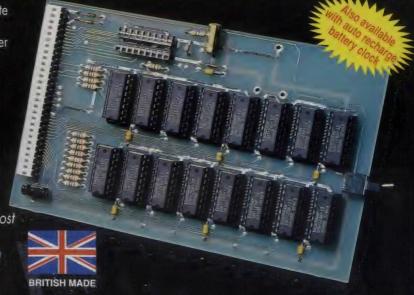


Price includes VAT and post and packing

Tel: 0582 491949

Send order with payment to:

WTS ELECTRONICS LTD, Chaul End Lane, Luton, Beds LU4 8EZ





Alien Encounter. This mission has three objectives, but since you teleport into the middle of a bug-eyed aliens' convention it means staying alive is the most pressing matter on your mind.

IMPRESSIONS £24.99 ■ Mouse/Keyboar

f vou've ever fancied getting your hands on a phased plasma rifle with a forty-watt range and bagging yourself a bug from Planet X, now's your chance, as Impressions take us once more to the Breach, dear friends. Of course. Breach 2 is the seguel to Omnitrend's classic original.

A futuristic combat/role-playing game, Breach 2 gives you control of a bunch of star-warriors struggling for peace, justice and freedom. Each individual squaddie has a predetermined supply of arms, ammunition and medical supplies, which have to be employed within a team strategy to complete a mission. It's either a search-and-destroy sortie where everything's fair game, or military intelligence (surely a contradiction in terms?) tasks where information or prisoners must be liberated.

Seen from an overview map, the troopers stand on or in the various geographical features. These affect everything from the amount of cover to movement rates. Even the fighting's subservient to the map, working on the principle that it's only possible to shoot what you can actually see. And if a bad guy's hiding around the corner you won't know he's there till you step round and take a peek.

Moving's simply a case of drawing a line between the trooper's present position and his destination. Shooting's a matter of facing the right way and clicking on the man, creature or thing you want to blast. If you're lucky, a hit's calculated and they die in an acrid cloud of laser-induced smoke.

Each soldier in your squad has a set of statistics. Health points and vitality are the most crucial, determining movement and how long the man will live. Both can be recovered with rest or medipaks.

Different stats come into play when troopers try to 'crack' enemy computers or during other, more avant garde, activities. Like all actions in Breach 2, success or failure is governed by role-playing percentages, with the Amiga doing the cross-referencing instead of your poor, tired finger.

The real key to Breach 2 is strategy. Since this is based on the actions of a small group, the battles should be short skirmishes where single shots tip the balance, drawn-out artillery duels. Continual awareness of the status is essential. group's Superior troop strength almost



Making life difficult for yourself with the mission designer kit.

guarantees success, but correct use of equipment can be a real time-saver and a life-saver. A wellplaced grenade or neutron bomb could avoid turn after turn of futile

Initially Breach 2 is confusing, with troopers only accessible in a certain order and missed mouseclicks causing unintentional buddy blasting. Once you are over this hurdle though, it's the missions that cause the real problems - and that's just as it should be. **Trenton Webb**



Breach 2 doesn't look too good, with small repeated sprites overlaid on a basic map, but it doesn't need to be stunning. The squad are purely pieces in a highly-evolved chess game and the map's no more than an easily viewed information system, that relates details of terrain and cover quickly.

Sound, on the other hand, is not something that wargames generally stress, but Breach 2 scores strongly. With neat laser shot effect and quirky death cries tied in with a laid-back jazz number to signify victory, this is something of an exception to the rule. While no sonic cathedral, the sounds suitably heighten the fun to be had when zapping defenceless individuals.

LASTING INTEREST

Breach 2 is packed with good scenarios that can be linked into a campaign, gradually increasing in difficulty - from tough to mission impossible level - as your surviving squad leader grows in power. The initial set-ups alone will keep determined warriors in battle fatigues for months. As a last ace up its sleeve, though, Breach 2 throws in a mission designer. This allows you to give the enemy or yourself more firepower for serious carnage.

JUDGEMENT

Breach 2 is slow, but strangely absorbing. Once the game as a concept is understood, players can start to use the mechanics of each scenario to their benefit. exploiting the strengths and limiting the weaknesses of a squad. Which makes Breach 2 the obvious choice for those who like their wars to be personal, faceto-face, hate-filled affairs.



The element of surprise is vital. Having forded the river the marine is ready to deal out some punishment. Lock and load, rebel slime balls.

GRAPHICS	3
SOUND	6
INTELLECT	9
ADDICTION	5
	9%
Consider the thirth in this party and the state of the control of	el as mande

GOT A 64? GET A COPY!

100 pages packed with unmissable reviews, tips,

guides, previews, cheats and

news

DEATHBRINGER PLAYABLE DEMO of X-Soft'S
NEW Blast-'Em-Up LASERHEAD

and the mo

reliable reviews!

Get the most out of vour

64!

Games explained not just described

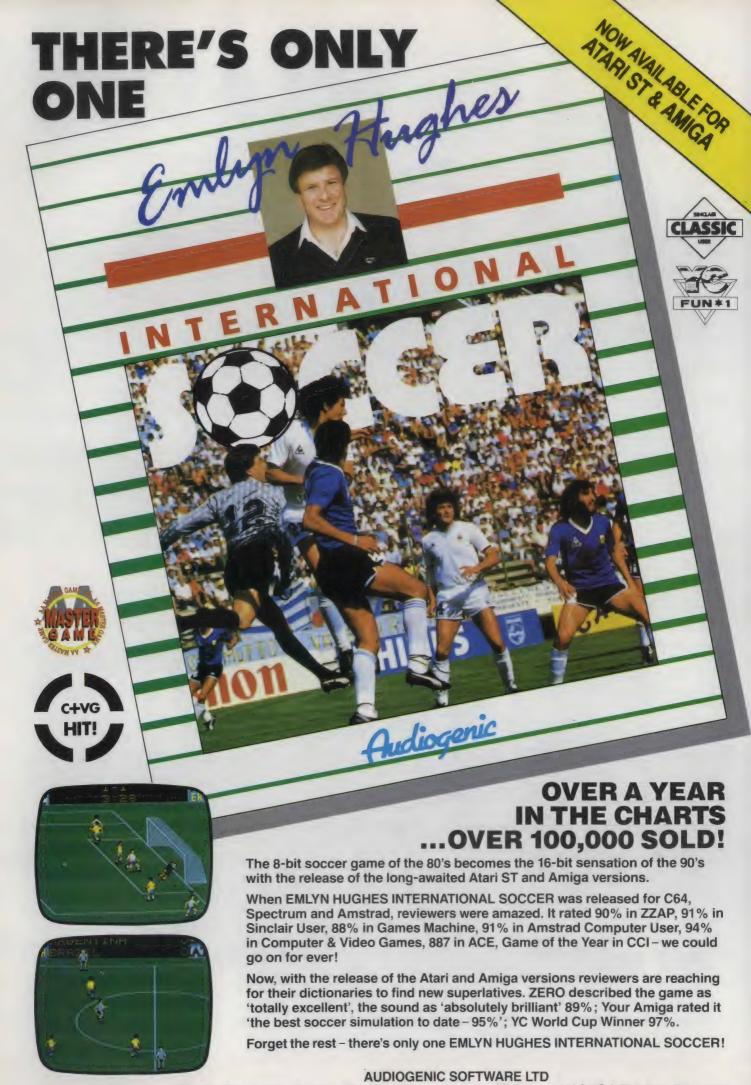
Free cassette!

Every issue has at least one complete game and a fistful of demos!

The world's best guide to 64 gaming

into your mas

Commodore Format: It'll be quite good. Probably.





Everyone else has gone off to church, so it's time for some serious tile flinging while they're all away!

WELLTRIS

INFOGRAMES £24.99 ■ Keyboard



A high score has been reached, so out comes the vodka and everyone has a right good singalong! These chaps certainly know how to throw a good celebration knees-up!

henever puzzle games come under the scrutiny of the reviewer, no matter how eloquent the prose, talk returns to the all-time classic *Tetris*. This time around it just can't be avoided – *Welltris* is the follow-up!

The original had the player manipulating falling blocks so that they formed lines in a vertical, rectangular grid. *Welltris* follows the same principal, except the action takes place in four planes instead of one. Sound confusing?

A multitude of options is available to suit your own needs.

Well it's actually quite simple. Shapes made up of squares fall down the sides of a square 'well'. While they're on the sides of the well, the player can move the pieces sideways around the walls and rotate them through 90 degrees. When the piece hits the bottom of the well, it slides across until it hits a wall or another piece.

The idea is to make solid lines either vertically or horizontally, which are then removed allowing the remaining pieces to slide

"Ow 'bout it eh? Just a quick go at Welltris back at my place?"

towards the middle, thus freeing up space around the walls. As an occasional extra a larger bonus piece appears which, when fitted into the grid, gives an extra boost to your score and advances the speed up to the next level.

If any piece leaves a square on the side of the well, then that wall turns red and no piece can be moved onto it for three moves. If all four walls turn red at one time, then no more pieces can appear and it's game over. **Maff Evans**



Russian popsters rock it up - so why the weedy game music?



GRAPHICS AND SOUND

With a game like Welltris, there isn't really much need for super snazzy sound and graphics, since the gameplay is all that really counts. Having particularly bad colours on screen could make the going a little daunting though! Fortunately, Welltris has been very well designed. The graphics are sharp and clear, with some rather pretty sidescreens to make progressing through the levels a bit more interesting. The sound effects are rather atmospheric too, if a little sparse, with an echoey 'clunk' as the pieces slam together when a line is completed and a ghostly howl when a wall is locked up. Unfortunately the tune makes a return to the overly jangly and twee Russian folk songs. After all there is a picture of a rock band in the game, so why couldn't we have a more rockin' soundtrack?

LASTING INTEREST

If you start playing Welltris, don't plan on having much of a social life! The first game is all you need to get hooked, then it's just one more game, then another, then another, then...

JUDGEMENT

No other puzzle game has managed to break the bounds of originality quite in the same way as Tetris when it first appeared four years ago. The game was so addictive that many people still play it today! Welltris isn't quite as original - after all, it is a follow-up - but the principal is just as challenging as ever, and the new variations make it seem almost as fresh as when Tetris first appeared. Whether you consider yourself a puzzle freak or not, get hold of a copy of Welltris, then try the real challenge of tearing yourself away from the game!

GRAPHICS 7
SOUND 4
INTELLECT 6
ADDICTION 9
OVERALL 88%

ietnam in 1966. 400,000
American soldiers fighting a war on foreign soil, for a cause few understand. The US military, winning hearts and minds at the point of gun, rules the air. The VC, baptised by fire at Dien Bien Phu, rule the jungle.

This is now your problem: your squad was returning to base in a helicopter when the 'bird' went down. Stranded 57 miles from 'home' walking's the only option. Armed with minimal ammo, a few grenades and two days' supply of food, the Lost Patrol is under your command. The only obstacles that lie in the way are minefields, VC patrols, hostile villagers, booby traps and failing morale.

In this unique icon-controlled graphic adventure, you must guide the team across the main game map to the last outpost on the road to hell – Du Hoc, the only place you can call home. A compass is used to guide the boys by clicking on one of the points. The team walks at three

different speeds – double march, normal and extreme caution. It would be better to travel at 'gee Mom, I'm scared' pace, checking every blade of grass, but the food supply won't allow it.

Your grunts can search areas, rest and dig in for the night. Traps can be laid with either grenades or claymores. Food consumption must be strictly limited. No vast list of options, but enough to survive in Charlie's back yard.

Using recon info, scouts work out the lie of the land terrain-wise but not Charlie-wise. The enemy just pops up, in small parties or large groups toting heavy machine guns, and each has a different arcade sequence to decide the encounter's outcome.

One-on-one confrontations are beat-em-up sub-games. Both troopers stupidly put down their guns and try to punch the living daylights out of each other. Group encounters have the marines pinned down in a foxhole. Standing up to shoot or throw

grenades and ducking to avoid the Cong in a *Op Thunderbolt*-style blast. Against the machine gun bunker, grenades are the only option, and they're in short supply. So soldiers need quick, accurate and careful throwing.

Other interactive elements of Lost Patrol (aka Nine go mad in Indo China) are the minefields, snipers and dealing with villagers. Minefields require a bayonet and some slow digging if you're to get past without going 'poof'. Snipers are a pain in just about any part of the body. Your chosen marksman scans the tree-line with a telescopic sight, seeking the virtually invisible muzzle flash of the VC



One of the neatly art-worked incidental screens.

who's taking your squad apart man by man. Dealing with locals gets very heavy indeed, with two of the four options being kill one and kill all – we are talking Mai Lai simulator here. Questioning them can earn food, while searches reveal tunnels.

The men who are under your command are a fickle bunch, considering you're trying to save their necks. Cut the food supply down and they complain. Make them march too fast or too long and they whinge about lack of sleep, and if morale drops they run off into the bush. Suicidal for them and the rest of the platoon.

Trenton Webb



At war with the VC. Blast them before they shoot you!

LOST OL PATROL

OCEAN £24.99 ■ Joystick/Mouse/Keyboard





Facing the sniper is a tense business. The sights have to be used to scan the tree-line looking for a tiny muzzle flash - then shoot!

GRAPHICS AND SOUND

Lost Patrol is a joy to watch.

screens, it captures the war-

Packed with still and animated

weary mood of the GIs and the

still frames are backed up with

digitised sequences of troopers

M-16s at the ready. These can

along, but are vital to the game's

structure. Motivation stems from

the desire to see the next scene

The movie idea is supple-

as much as getting back to Du

mented with a great theme and

the occasional excellent effect:

the metallic lock and load sound

as the snipers force rounds into

Hoc for a warm can of Bud'.

romping through the jungle,

be turned off to speed play

natural beauty of Vietnam. These

may damn Lost Patrol as a series of impressive graphics strung together with a tenuous plot. But with Vietnam accepted by popular cultural as the first TV war, its story can only be captured using film techniques. Any other genre would have

lacked the 'Nam feel that

Lost Patrol exhibits.

LASTING INTEREST

Lost Patrol stresses the graphic element, and so has massive instant appeal. Yet there are only 28 intermediate scenes, 5 digitised sequences and 10 arcade or interactive sub-games. There's a lot to see, but it can get repetitive meeting the same VC patrol sub-game time after time. Even the arcade sequences get dull once the best techniques



A change is not always as good as rest, as the weary troopers of your squad continually let you know, so a kip's often the only option.

for overcoming the obstacles or enemies are learned. A bunch of weary troopers would not attack VC patrols merely to nick their supplies, but once you've sussed the sub-game this does become a practical proposition.

The Lost Patrol will feasibly find their way home with in a few days. The pictures may lose some of their appeal after repeated sightings, but there's still enough of a game buried beneath the graphics to justify the project. All the same, only the die-hard and the foolhardy will see everything and still make it home.

JUDGEMENT

Lost Patrol looks good and plays well enough to capture the atmosphere of America's worst national nightmare. There's little

unity in the squad, no will to survive, and you as Sgt Weaver must turn these city boys into jungle warriors. Holding them together as a unit you must balance their whining with just enough military discipline to see you through. Lost Patrol lets you go 'in country' for a short while and earn a little glory - or at least a Purple Heart - without the necessary trauma of being shot at while there and spat on when you reach home.





One brave platoon member tries to negotiate a minefield. Unluckily he doesn't make it and you're treated to the dead GI screen.



The river crossing is no hassle but it does slow you down. Still, you get to watch the animated screen of boatmen while you wait.



A GI encounters a lone VC in one of the combat sub-games.

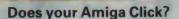


A grunt's life is not a happy one, all walking and no killing!

SPECIAL

Power Computing are pleased to offer some extra special deals

NOW ANTI CLICK! PC 880 Super slim case **880K Formatted** ■ Thru' port Free Diskette INC. VAT Isolating Switch **INCREDIBLE** 12 Month Guarantee A500 512K EXPANSION Battery backed clock sion Expansion + "F29 Retaliator" "It Came From Th £69.95 £65 LIATOR





Cure the problem with this special circuit that plugs inside your Amiga and stops DFO clicking

Name	Teleph	none
Address	Credit Card no. Signature	Expiry date
Postcode		and the same of th
I would like to order	System owned	
I enclose a cheque / PO for	Make cheques payable to Power Computing Ltd	

Orders Only 0800 581742 Free Call

General Enquiries & Orders 0234 273000

Power House, 44A Stanley Street, Bedford MK41 7RW

OF TOP QUALITY SOFTWARE

Our extensive range of Amiga software currently includes:

£45 160 163 £48 £55

£49

£29 £34

£15

£49 199

Art and Graphics	Languages Etc
Animagic £69 Comic Setter £37.95	Devpac Amiga
Comic Setter £37.95	Lattice C v5£
Deluxe Photolab £48	Manx C Dev£
Digipaint 3 £49	Power Windows 2,5
Elan Performer £39	Hisoft Basic
Fanatvision £29,95	Lattice C++£
Interfont £79	Manx Debugger
Kara Screen Fonts £49	
Pro Video Plus PAL: £169	Utilities
Pro Draw 2.0 £100	Arexx
Sculpt 4D Junior £149	BBC Emulator
Turbo Silver£99	DOS 2 DOS
XCAD Professional . £325	Fine Print
Deluxe Paint 3 £59	Transformer
Deluxe Video 3 £79	BAD
Digiview Gold 4 £99.95	Cross DOS
Express Paint 3 £69	Quarterback
Interchange£49	WB 1.3
Intro Cad£39	
Movie Setter £48	Music
Plxmate £35	Midi Interface
Sculpt 3D XL£99	Dr T's Drums
Sculpt 4D £399	KCS Level 2£
Video Magic & P.A.S.E £49	Pro Sound Gold
XCAD Designer £87.95	Sonix
WWW. Property and the second	MM5000 Keyboard
Word Processing, DTP	Dr T's Midi Studio
& Business	Music X£
Excellence £159.95	Amiga Music System
Vind Morda	

Kind Words £39 Pen Pal £99 Superbase Pro £160 The Works Platinum £149

Home Accounts £24.95

Pagestream £120 Pro Page 1.3 £179 Pro Text£74.99

Word Perfect £164

Pro Write 3.0 £99.95



WE ARE THE SPECIALISTS WHEN IT COMES TO PROGRESSIVE SOFTWARE. CAN'T SEE THE TITLE YOU'RE LOOKING FOR? CALL 0234 273000 AND OUR SALES TEAM WILL BE PLEASED TO HELP YOU.

Power Computing Ltd · 44a Stanley Street · Bedford · MK41 7RW Telephone 0234 273000 · Fax 0234 270133

FIR (()()

LE K S T RI B

YOUR

P 6 8 0 3 0 0



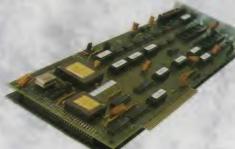
- Accelerate your Amiga up to 10 times normal speed!
- Up to 8MB High speed 32 bit "nibble" RAM.
- On-board AT interface for light ning fast hard disk access
- Optional 68882 Coprocessor

QUALITY GVE HARD CARDS AT **UNBEATABLE PRICES!**

- Plug in & Go! Installation
- 20 100 MB
- Sockets for 2MB Simm RAM
- Autoboot feature

20MB £399 **46MB** £499 **60MB 80MB** £699 100MB Quantum £899 2MBRAM Upgrade £149





AMIGA

2000

POWER HOUSE

SUMMER SPECIAL!

40MB QUANTUM HARD CARD AT THE INCREDIBLE

PRICE OF

INC. VAT LIMITED OFFER ONLY 68030 ACCELERATOR BOARD 16MHz £599 28MHz £799 **68030 WITH 4MB 32BIT RAM** 16MHz £1595 28MHz £1795 33MHz £2579 QUANTUM 11ms AT Hard Disk ProDrive™ 40MB £459 80MB £839 Phone for other combinations

8MB EXPANSION BOARDS

with Hard Disk Controller

- Expand up to 8MB with on-board SIMMS
- All necessary connections for SCSI Hard Disk Drive

2MR £439 4MB £579 8MB £869

HARD DRIVES **46MB** Seagate £329 60MB Seagate £489 84MB Seagate £568 100MB Quantum £799

£159.95

£299 INC. VAT

BUY YOUR AMIGA 2000 SYSTEM FROM

Leaders the Home and Business in

- Amiga B2000 Rev 6.2
- 1MB RAM
- 20MB Hard Disk

INC. VAT



VIDTECH SCANLOCK

STATE OF THE ART AMIGA GENLOCK

- Broadcast quality video
- PAL, NTSC, SVHS Compatible
- Handles all Amiga Graphics modes
- Completely Eliminates video dot crawl





MULTISYNC GRAPHICS

Enhance your graphic capability with a flicker fixer and Multisync monitor

Microway Flicker Fixer £299 Samsung Multisync £499 NEC Multisync 3d £649 £1095 NEC Multisync 4d

AMIGA 3000

Amiga B2000 £899 Extra internal floppy £49 8MB RAM Board with 2MB RAM £299 **2MB UPGRADE FOR THIS**



SYSTEM

EASYL 2000

- Pressure Sensitive Drawing **Tablet**
 - Draw directly on your computer screen
- Using ordinary pen or pencil
 - 1024x1024 pixel drawing area
 - Works with all popular software packages

£899 INC. VAT. NOW AVAILABLE - £CALL

Power Computing Ltd • 44a Stanley Street • Bedford • MK41 7RW

Telephone 0234 273000 · Fax 0234 270133

Orders and dealers enquiries welcome by Telephone or Fax ALL PRICES INCLUDE VAT AND 24 HOUR DELIVERY · PRICES SUBJECT TO CHANGE WITHOUT NOTICE





Power's exclusive range of offers on floppy drives!

The Famous PC880 Power Drive!

The dual 3.5" drive

NEW IN!

Special NEW circuitry to prevent that annoying click when the drive is empty

with power supply

Isolating on-off switch

ONLY £110

Thru' port for daisy chaining

Comes with free utility disk



880K formatted!



12 Month warranty

We also stock fully guaranteed Verbatim disks and a range of boxes, including:

40 Disks with lockable storage box - ONLY £29.95

15 Disks with storage box, for an unbeatable £9.95!

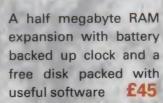
The A500 Internal drive kit

External 5.25" drive

£49

MEMORY EXPANSIONS

The A500 Clock Card



OR! With a new release ONLY £49 game!

PRINTERS

We are proud to present an offer you'll be proud to accept!

Glorious Colour Kit!

LC10 Colour model

LC10 Colour £229

Parallel Cable

LC24 10 £259

200 sheets paper

XB 10-24 Colour £499

200 address labels

HP Paintjet Colour £799■

Delivery and VAT

HP Paintjet Colour XL A3 £2500



Plugs easily into your Amiga (Kickstart 1.3 & above) to give you the memory you need. Simple internal fitting

ONLY £149





Expand up to 4MB with our latest board £239 Expand up to 6MB with our latest board £Call

RAM chips for the upgrade specialist! 256 x 4 RAMS £6.99 Kickstart 1.3 ROM £39

1 x 1 Mbit RAMS £9.95 GARY ROM £49



LC10 Colour Fabric **Printing Kit** ONLY £24.95

Also in stock, an impressive range of automatic sheet feeders, replacement ribbons and printer stands.

ALL PRICES INCLUDE VAT AND ARE SUBJECT TO CHANGE

MPUTING

POWER - the potential for your Amiga!



Basic Pack Super Pack Ultra Pack Mega Pack Hyper Pack As above With PC880 Drive With PC880 and 512K With PC880 and 1.5MB LIMITED TIME ONLY £399 £459 £499 £599 £949

With PC880, 1.5MB and A590 Hard Drive!

COMMODORE A590 20MB Hard Disk £379 ADDITIONAL 2MB RAM £55, Both £434

The GVP IMPACT A500 Hard Drive With SIMMS for a huge 4MB extra RAM!

OPAT CANTES SEALER

	OK	2MB	4MB
20MB	£359	£459	£559
45MB	£599	£749	£899
80MB	£849	£999	£1149
100MB	£999	£1149	£1299

MONITORS

The Phillips 8833

£269

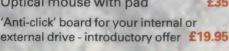


The NEC Multisync ONLY £649!
The ultimate high performance device supporting mono and colour formats

ACCESSORIES The finishing touch

Keep it covered! With this new hard wearing dust cover specially designed to fit snuggly over the Amiga

Replacement 2 button mouse £20
Naksha Mouse £35
Optical mouse with pad £35





POWER HOUSE DIRECT

Power House is the fast expanding direct sales arm of Power Computing Ltd. With competitive prices, backed by large stocks and a trained sales and technical department. Our high speed computerised service makes Power the first stop for the Amiga enthusiast. Call us now on 0234 273000 for advice on the very latest in software and peripherals.



Rush in your credit card order FREE on 0800 581742. Make the most of our "fast fax" service on 0234 270133, or simply fill in and post this form to:

Power Computing Ltd, Power House, 44a Stanley Street, Bedford, MK41 7RW.

2001010,111101171	
Name	
Address	
Postcode	
Telephone	
System owned	
Credit Card No.	
Expiry Date	
Signature	-
I would like to order	

Σ



Make Cheques Payable to

I enclose a cheque/PO for

Power Computing Ltd

VISIA



The Arabs get serious. These two are unkillable, unlike their brothers on other screens, but you need to get both the torch and the ammunition before entering the caves. Life's like that for explorers.

TUSKER

SYSTEM 3/ACTIVISION £24.99 ■ Joystick/Keyboard

ccording to legend there is a secret place where all the elephants go to die. Next-door to this proboscidean hospice is the elephant's graveyard, ivory city! Your old man spent his entire adult life searching for this mysterious place and since he's croaked you've taken over his mission.

Tusker's set in the horizontallyscrolling style. As the intrepid grave robber you bounce through the wilderness, bashing evil Arabs and topping terrible beasts in a bid to solve the ancient mystery. There's a rucksack full of kit to pick up on your quest, each bit with a specific use.

What to do with the gun is pretty obvious; once you've found

the bullets, blow things to kingdom come. Similarly any underground exploration requires a light source. So select the torch and what do you see? Darkness. That's how it will remain until the matches are used to set the damn thing alight.

The epic adventure begins in the burning desert, a land populated by poisonous snakes and big guys wearing bed linen. Don't get cocky though, because even when you've beaten these ordinary foes there are some unnatural enemies to avoid: a deadly whirlwind that saps energy like there's no tomorrow, and a massive hand that seeks to scrunch the brave adventurer up like so much used Kleenex. **Trenton Webb**



"I saw this one in Raiders" Tusker jnr said, going for his gun.

GRAPHICS 8
SOUND 6
INTELLECT 7
ADDICTION 6
OVERALL 68%

GRAPHICS AND SOUND

Bright, brash cartoon graphics capture the feel of swashbuckling adventure. The simple and clean game design is only marred by the odd problems Tusk inr has stepping over minute pebbles, or walking around obstacles. The flickscreen scrolling is annoying, since the hero can't see what's up ahead. The theme is a moody, slow-paced tune that's almost but not quite totally inappropriate for the fast pace the game encourages. The effects are unconvincing, but that's in keeping with the cartoon style of the graphics.

LASTING INTEREST

This running around lark is all very exciting, but can get dull if you don't get anywhere. After a few sorties around the desert, the caves become apparent, and after that the jungle. There's ever more stuff to collect and more combinations of kit to discover, but with only four lives getting far takes repeated playing. Every survival trick must be learned before you stand a chance of reaching somewhere new.

JUDGEMENT

If Tusker gets the hooks into you it will last for aeons, as you hack through masses of undergrowth and villains. Even with the combination factor for items, though, the game cannot be viewed as anything radically different from the avalanche of horizontal arcade adventures that have gone before. That said there's nothing wrong with Tusker, it's just that it will never be a contender, no matter how much pushing and shoving you do.

PHOTON STORM

ARC £19.99 Mouse

Jeff Minter, long famed for his psychedelic video game 'trips', has come back after a long silence with a rerelease, Gridrunner (reviewed last issue) and a new game in the shape of Photon Storm. This game places you in control of a flying 'dart', zooming through space collecting dangerous plutonium pods. The pods have been lost and are scattered

throughout various sectors. You must fly around collecting as many as possible while fighting off waves of alien attackers. If all the enemies in a wave are destroyed, you can jet through the portal to the next sector, storing any pods you have managed to protect.

As you'd expect from Jeff, the appearance of Photon Storm is bright and colourful,



The Photon crusier gets attacked by a blue square! Move that cursor round and shoot it dead or head for the pyramid.

with cycling psychedelic colours used liberally throughout. The action of the game itself is frantic and should appeal to fans of his earlier work, but those unfamiliar with the Minter 'freakout' scene may find themselves frustrated due

to the strange and sometimes unwieldy control method. Unfortunately, Photon Storm – despite its fast and frenetic pace – doesn't break any new ground over Minter's older games and this limits its appeal. Stuart Hancock



WAREHOUSE CLEARANCE OF NEW SURPLUS AMIGA SOFTWARE

- TOP TITLES chosen by our experts. Many were in the charts just weeks ago.
- LIMITED QUANTITIES The number shown beside each title is all that we have managed to buy so order today.
- MASSIVE SAVINGS you could save over £60 with your very first order.
- NO COMMITMENT we are not a "Club". Our bargains are genuine "NO STRINGS" deals. You buy only what you want when you want,
- LOTS MORE Far more than we can show - place your first order with us, to receive our MEGA BARGAIN list, plus a preview of our next advert.
 - GUARANTEE Every title is covered by our NO HASSLE replacement guarantee.

No Trade Enquiries Please



Order by Phone ©



(0782) 204639 with your credit card or BY FAX if you like on (0782) 202269



or Post the coupon today - but HURRY - at our incredible prices we expect to sell out FAST. To avoid disappointment please indicate your 2nd & 3rd alternative choices if possible.

OR CALL AT Software Superstore



11 Market Square Arcade Hanley STOKE ON TRENT





6 Mealhouse Brow (off Little Underbank) STOCKPORT





27 BALDWIN STREET ST HELENS Merseyside



6 Waingate SHEFFIELD

<u></u>			$\overline{}$
	X		
_	_	_	

SOFTWARE SUPERSTORES LTD Unit 7a Oldham St., Hanley STOKE-ON-TRENT ST1 3EY

Address		Block letters
	Post Code Expires	
TITLE	COMPUTER	PRICE
AF/JN All orders	add Post & Packing Total	0.95

for Europe add £3. Outside Europe add £5

he mere idea of a Last Ninja Two is a strange and wonderful paradox, but it does give hope to the Dodo. It could mean two things; either the Last Ninja One was a downright fibber or it was in fact the penultimate ninja. The game itself is a shuriken-em-up outing combined with an element of puzzle solving. To add to the interest, and to give that real coinop feel, there is also a clock to play against.

Not surprisingly, you get to play a highly-trained yet caring and pyjama-clad Ninja of the first water. You even have a name -Armakuni - possibly you were descended from a race of French fashion designers versed in Ninjutsu. Certainly this is the way you look until the rather eccentric joystick controls have been mastered. Best advice here is not to bother with finding things or beating people up - nope, you should really spend some time working out a way to move from one place to another without walking into invisible walls. Although the isometric pseudo three-dimensional movement is a pain in the jimjams, it does fit quite happily with the scenario.

This, Norman 'Ninja' Wisdom script sees you standing around with the rest of the chaps a few centuries back in time, when suddenly you are whizzed into the future and find yourself standing

on a bandstand. Willing suspension of disbelief or what!?

At the outset, the idea is to explore locations and pick up the odd weapon (rather absentmindedly, you neglected to come tooled up). The further you get into the game, the more places there are to explore and the more people there are to amaze with your deft fighting skills. Once you're really into the game... there are hundreds of places to explore and... you get the idea, I'm sure. The idea is to get home in one piece so that you and the rest of the lads can design some really neat French clothes or defeat the evil Shogun, Kunitoki. Tim Smith



It began as a growth on his big toe... a Ninja gets a right biffing.

GRAPHICS AND SOUND

The scenes have that pleasant blocky form along with the smoothness of movement only found in gazelles - with lumbago. Little Armakuni does a great Michael Jackson moonwalking backwards if you forget to press J on the keyboard to alter the joystick orientation (so handy for those fight scenes when timing is of the utmost importance). As for the sound, there is very little to speak of aside from the soundtrack, which is nice enough but does leave you wishing that they'd never invented that bloody flute voice on the synth. This really is quite a disappointment because the possibilities for some sickening thuds and whistling leaps are endless.

LASTING INTEREST

The one saving grace is that it is not merely a 'kick the shoot out of everyone' session and neither is it a 'my brain hurts' exploration game. If you really commit yourself to it, there is a chance that some enjoyment can be extracted from the playing time. In true terms of lasting interest, however, you have to give the game more than it gives you.



A gate, a wall, a ninja. It's up to you to work out the, er... puzzle





SYSTEM 3 £24.99 Jovstick



Behind you!!! Behind you!! Yet again the severely uncoordinated Ninja gets into trouble with the brutish occidental thug. Lucky you've got so many other interesting bits to look at on screen...



Nelly ninja gets it in the neck neurosis... not his day, really?

JUDGEMENT

The sad thing is that the ideas are all there; the 3D movement is a step up from the run-of-the-mill vertical or horizontal stuff. The attempt to mesh intelligent puzzle solving with brute force has merits... it's just that none of these elements really come close to working together. The feel is wrong purely because you have to work so hard to communicate with the game that you lose the interest in the scenario, and, as for poor old Armani, you couldn't really care less about him. That said, if you were committed enough to want to pit your game-playing skills against the game then it might see you through those long autumn afternoons.

X-COPY II is the ultimate disc

X-COPY II is the ultimate disc duplication system for your Amiga



Designed specifically for your Amiga...

❖The most comprehensive back-up facility❖Mouse controlled❖Also backs up ST, IBM etc❖Adapts itself to any configuration❖Checks discs for errors❖Formats discs in 36 seconds❖Optimises data, re-organises files for faster loading❖Full update service❖

AVAILABLE NOW ONLY £29.99 + £1.00 POSTAGE & PACKING.

X-COPY II is a hardware & software package. Although it will work happily on a single drive system, superior results can be achieved with an external disc drive.

1988 COPYRIGHT ACT. SIREN SOFTWARE NEITHER CONDONES NOR AUTHORISES THE USE OF ITS SOFTWARE FOR THE REPRODUCTION OF COPYRIGHTED SOFTWARE. THE FACILITIES OFFERED BY X-COPY II ARE INTENDED TO BACK UP USERS OWN SOFTWARE, PD SOFTWARE & OTHER SUCH PROGRAMS WHERE PERMISSION HAD BEEN EXPLICITLY GIVEN. IT IS ILLEGAL TO MAKE COPIES OF COPYRIGHTED MATERIAL WITHOUT THE PERMISSION OF THE COPYRIGHT HOLDER.

X-COPY ILLS THE BEST GUARANTEED

OUR GUARANTEE:- At time of purchase, if you can find a program that is more powerful than X-COPY II, we will refund your money.

Access	

Ordering x-copy II

Access/Visa orders can be placed by telephoning 061 228 1831. For mail order, fill in the order form below and send with a cheque or postal order to:- Siren Software, 84-86 Princess St. Manchester M1 6NG. England.

VISA

ADDRESS.

BYTEBACK





Ring us now! 0636-79097 we're programmed to help

GAMES All dogs go to Heaven Blue Angels Somber Blue Angels Somber Blue Angels Somber Castle Master Chess Champion 2175 Combo Racer Cyberball AMOS - Games Creator Damocles Datastorm Dragons Breath Drakkhen Dynasty Wars Dyter 07 Secape From Robot Monster Fire and Brimstone F-29 Retaliator	18.90 18.90 19.90 18.90 18.90 19.90 18.90 15.90 15.90 15.90 18.90 18.90 18.90 13.90	COMPILATIONS ONLY! ALL TIME FAVOURITES	ART TV Text		PUBLIC DOMAIN 1 disk = £2.50, 5 disks = £9.90 10 disks + file box = £18.90 This is just a selection from our Public Doma Library Ask for our new AUGUST cataloguel AU.01 Jazzbench - Superb Workbench replament; fully multitaskingl AU.03 QL Emulator - plus 2 disks full of programs. (3 disks: £6.90) AG.01 Star Trek 1 - Version of the ST adven-
Blue Angels Bomber Budokan Lastle Master Chess Champion 2175 Combo Racer Cyberball AMOS - Games Creator Damocles Datastorm Dragons Breath Dynasty Wars Cyter 07 Scape From Robot Monster ire and Brimstone Flood29 Retalliator	18.90 19.90 18.90 18.90 18.90 18.90 18.90 15.90 15.90 18.90 18.90 18.90 18.90 13.90 15.90	Test Drive, Hard Ball, Mean 18+ Famous Course disk (vol. 1 and 2) WORLD CUP 90	Deluxe Paint 1 Deluxe Paint 2 Deluxe Print 2 DELUXE PAINT 3 Deluxe PhotoLab Director (The) DIGIVIEW GOLD (v.4) Fantavision		10 disks + file box = £18.90 This is just a selection from our Public Doma Library Ask for our new AUGUST cataloguel AU.01 Jazzbench - Superb Workbench replament; fully multitaskingl AU.03 QL Emulator - plus 2 disks full of programs, (3 disks: £6.90)
Somber Boudokan Boudokan Baudokan Baudo	19.90 18.90 18.90 19.90 15.90 15.90 15.90 18.90 18.90 18.90 18.90 18.90 13.90 15.90	Famous Course disk (vol. 1 and 2) WORLD CUP 90	Deluxe Paint 1 Deluxe Paint 2 Deluxe Print 2 DELUXE PAINT 3 Deluxe PhotoLab Director (The) DIGIVIEW GOLD (v.4) Fantavision		This is just a selection from our Public Doma Library Ask for our new AUGUST cataloguel AU.01 Jazzbench - Superb Workbench replament; fully multitasking! AU.03 QL Emulator - plus 2 disks full of programs. (3 disks: 56.90)
Budokan Castle Master Chess Champion 2175 Combo Racer Cyberball AMOS - Games Creator Chamber Creator Chamber Creator Chamber Chamber Creator Chamber	18.90 19.90 18.90 15.90 34.90 15.90 15.90 18.90 18.90 13.90 15.90	Famous Course disk (vol. 1 and 2) WORLD CUP 90	Deluxe Paint 2	19.90 59.90 49.90 42.90	Ask for our new AUGUST cataloguel AU.01 Jazzbench - Superb Workbench replament; fully multitaskingl AU.03 QL Emulator - plus 2 disks full of programs. (3 disks: 56.90)
Castle Master Chess Champion 2175 Combo Racer Cyberball AMOS - Games Creator Damocles Datastorm Dragons Breath Dynasty Wars Dyter 07 Secape From Robot Monster Flood 29 Retalliator	18.90 18.90 15.90 34.90 15.90 15.90 18.90 18.90 13.90 15.90	WORLD CUP 9016.90 Kick Off, International Soccer, Track Suit Manager THRILL TIME (8 GAMES!)16.90 Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	DELUXE PAINT 3 Deluxe PhotoLab Director (The) DIGIVIEW GOLD (v.4)	59.90 49.90 42.90	Ask for our new AUGUST cataloguel AU.01 Jazzbench - Superb Workbench replament; fully multitasking! AU.03 QL Emulator - plus 2 disks full of programs. (3 disks: 56.90)
Chess Champion 2175	19.90 18.90 15.90 34.90 15.90 18.90 18.90 18.90 13.90 15.90	Kick Off, International Soccer, Track Suit Manager THRILL TIME (8 GAMES!)16.90 Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	Deluxe PhotoLab Director (The) DIGIVIEW GOLD (v.4)	49.90	AU.01 Jazzbench - Superb Workbench replament; fully multitasking! AU.03 QL Emulator - plus 2 disks full of programs. (3 disks: 56.90)
AMOS - Games Creator Damocles Datastorm Dragons Breath Drakkhen Dyter 07 scape From Robot Monster ire and Brimstone Flood Flood	18.90 15.90 34.90 15.90 15.90 18.90 18.90 13.90 15.90	Suit Manager THRILL TIME (8 GAMES!)16.90 Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	Deluxe PhotoLab Director (The) DIGIVIEW GOLD (v.4)	49.90	ment; fully multitasking! AU.03 QL Emulator - plus 2 disks full of pro- orams. (3 disks: £6.90)
AMOS - Games Creator Damocles Datastorm Dragons Breath Drakkhen Dynasty Wars Dyter 07 scape From Robot Monster ire and Brimstone Flood29 Retaliator		THRILL TIME (8 GAMES!)16.90 Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	DIGIVIEW GOLD (v.4)	42.90	AU.03 QL Emulator - plus 2 disks full of pro- grams, (3 disks; £6.90)
Damocles Datastorm Dragons Breath Drakhen Dynasty Wars Dyter 07 Secape From Robot Monster Froand Brimstone Flood F-29 Retalliator		Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	DIGIVIEW GOLD (v.4)	42.90	grams, (3 disks: £6.90)
Damocles Datastorm Dragons Breath Drakhen Dynasty Wars Dyter 07 Secape From Robot Monster Froand Brimstone Flood F-29 Retalliator		Buggy Boy, Live & Let Die, Space Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	DIGIVIEW GOLD (v.4)		AG.01 Star Trek.1 - Version of the ST adven-
Datastorm. Dragons Breath Dragons Breath Dynakty Wars Dyter 07 Escape From Robot Monster Flood	15.90 18.90 18.90 18.90 13.90 15.90	Harrier, Thundercats, Battleships, Ikari Warriors, Beyond Ice Palace, Bombjack.	Fantavision	129.90	Aura acres (2 diales CC 00)
Datastorm. Dragons Breath Dragons Breath Dynakty Wars Dyter 07 Escape From Robot Monster Flood	15.90 18.90 18.90 18.90 13.90 15.90	Bombjack.			ture game. (3 disks: £6.90) AG.02 Pacman, Gravity wars, Hanoi, Jacklar
Oragons Breath Orakhen Orakhen Oynasty Wars Oyter 07 Scape From Robot Monster ire and Brimstone Flood 29 Retaliator	18.90 18.90 13.90 's15.90				Othello, Empire, etc.
Orakkhen Dynasty Wars Dyter 07 scape From Robot Monster ire and Brimstone lood29 Retaliator	18.90 18.90 13.90 's15.90	STAP WARS TRILOGY 12 00			AG.03 Star Trek.2 - (Agatron) Superb strateg game, see May issue of Amiga Formatl (2 disks: £4.90)
Oynasty Wars Oyter 07 scape From Robot Monster Fire and Brimstone Flood Petalliator	18.90 13.90 's15.90	STAP WARS TRILOGY 12.00	Pixmale	37.90	disks: £4.90)
Oyter 07scape From Robot Monster Fire and Brimstone	s15.90		ODADUJOS STADTED VIT	24.00	AD.01 Walker demo 1, animation of Star War
Fire and BrimstoneFlood	's15.90	Star Wars, Empire Strikes Back,	GRAPHICS STARTER KIT Aegis Animator/Images, Aeg		Walker (need 1MB)
lood -29 Retaliator			Artpak.1, Arazoks Tomb - Gr	aphic	AG.04 Monopoly; classic board game! AG.05 Pacman 87; Multi level game.
-29 Retaliator		Revenge of the Jedi	adventure!	451110	AG.06 Cosmoroids, Amoeba, Stone Age,
	17.90	HIT DISKS (Vol. 1)9.90			Backgammon, Chain Reaction, Yahtzee, Daleks, Blackjack, Klondikeetc.
	17.50	Goldrunner, Karate Kid II, Jupiter	Professional Draw	109.90	AG.10 Space Invaders + Lunar Landerl
FREE - ONE PUBLIC DOM	MAIN DISK	Probe, Slaygon	X-Cad Designer		
WITH EVERY TWO G	AMES	HIT DISKS (Vol. 2)9.90			AG.13 Adventure game solutions -
ORDERED!		Major Motion, Time Bandit,	UTILITIES	ONLY!	Over 100 including: Sierra, Infocom,
Pick from PD list oppo	osite!	Leatherneck, Tanglewood		20.05	Over 100 including: Sierra, Infocom, Rainbird, Ultima, Dungeon Master,
	47.00	PRECIOUS METAL18.90	AmigaDOS Toolbox	39.90	Future Wars(2 disks: £4.90
Hardball 2	17.90		Cashbook Controller	54.90	
Hero's Quest	18.90	Xenon, Capt. Blood, Crazy Cars,	Devpac 2	44.90	AG.14 Flascheiber; Professional quality Boulderdash style game! AW.03 Loons; 100°s including: the amusing Naughty Icons, Ram Icons, Music Iconsplu
Kick Off 2	15.90	Arkanoid II	Digicalc	29.90	Boulderdash style gamel
Kings Quest 4	24.90	CHILDRENS ONLY!	PUBLISHERS CHOICE	70.00	Naughty loops Partitions Music icons plu
Klax	15.90	CHILDRENS ONLY!	Page Setter, Kind Words 2,		Icon utilities.
ast Ninia 2	18.90		Choice + Fonts	Artists	AD.04 Probe Sequence; Simulation of video pictures from an interstellar probe landing on
Leisure Suit Larry 3	29.90	AB Zoo (Alphabet tutor)5.90	Choice 41 chis		pictures from an interstellar probe landing on
Lost Patrol	18.90	Fun School 2 (Under 6)13.90	Home Accounts	22 90	alien planetl AD.18 Puggs in Space; extremely funny anin tion of alien creature landing on Earth and
Manhunter San Francisco Midwinter		Fun School 2 (6 to 8)13.90	Logo	42.90	tion of alien creature landing on Earth and
Player Manager	13.90	Fun School 2 (Over 8)13.90	Pagesetter (2)	69.90	exploring AD.21 Busy Bee; Amazing 3D Ray Traced a
Police Quest 2	24.90	Three Little Pigs19.90	Pen PalPersonal Tax Planner	29.90	mation + Tree Frogi
Red Storm Rising	17.90	Three Bears19.90	1 Gradital Tax F Raintor		mationI + Tree FrogI AD.23 Ship & Sphere; Super Smooth Ray
Resolution 101		The Ugly Duckling19.90	X-COPY 3 (+ hardware)	24.00	Traced animation! AD 24 NewTek Demo Reel 3: Digitised picture
Rotox	18.90		The BEST Backup utility!	34.90	AD.24 NewTek Demo Reel 3; Digitised picture and Sampled Sounds make this the best der
Shadow Warriors	18.90	Postman Pat8.90	The BEST Backup dunty:		you'll see for a long timel (2 disks: £4.90) AC.02 Pagesetter Art; 100's of professional
Sim CitySpace Quest III	24 90	Micro English (GCSE)18.90	Professional Page (1.2)	179.90	quality clip art pics
Teenage Mutant Turtles	22.90	Micro Maths (GCSE)18.90	Professional Page (1.3)	42.90	quality clip art pics. AS.01 Boris Vallejo 1; Superb HAM pictures
Their Finest Hour	22.90	Micro French (GCSE)18.90	Virus Killer	9.90	from top fantasy artistl AX.01 Samantha Fox; 12 high quality
Treasure Trap			Workbench 1.3	14.90	digitised pictures
Turrican	15.90	DISKS (DS/DD 3.5") ONLY!	Works Platinum	119.90	AX.04 Playboy 1; 16 digitised pics.
Warhead	18.90		MUSIC	ONLY!	AX.08 Bra Busters; Digitised film samples fro
688 Attack Sub	18.90	Bulk - 100% Guaranteed!	MOOIO	OILL.	Electric Blue Videol
SALE * SALE *	SALE+	10 = 7.90 50 = 34.90 100 = 64.90	Deluxe Music Con. Set	49.90	JOYSTICKS ONLY
SALE & SALE &	JALL A	10 = 7.00 00 = 07.00	Instant Music	18.90	PARTICIPATION OF THE PROPERTY.
		Sony Boxed - 100% Guaranteed!	Mastersound	29.90	Joystick & Mouse extension4.
Archipelagos	4.90	10 = 12.90 50 = 59.90 100 = 99.90	LHIOLO V	00.00	Joystick lead - 3 metres I
Battle Squadron	9.90	10 = 12.90 50 = 59.90 100 = 99.90	MUSIC - X	99.90	Quickjoy Il Turbo9.
Blood Money Bloodwych	9.90	DOOKO ONLYI	P Sd Di	50.00	Quickloy III Supercharger9.
Bloodwych Data Disk	7 90	BOOKS (Abacus) ONLY!	Pro Sound Designer	39.90	Quickloy Jetfighter 12: Cruiser (CLEAR) 13: Competition Pro Extra 15:
Chessmaster 2000	9.90		ACCESSORIES	ONLY!	Competition Pro Extra
Colossus Chess X	9.90	Amiga for Beginners12.90	ACCESSONIES	OINET:	Arcade Joystick16.
Chrono Quest II	9.90	Amiga Basic Inside and Out18.90	Locking Disk Box (40+)	7.90	HARDWARE ONLY
Dragons Lair 2	18.90	Machine Language14.95	Locking Disk Box (80+)	9.90	UNITE ONE
Infestation	9.90	Tricks and Tips14.95	Media Box (150 - stackable)	22.90	Philips CM8833 monitor249.
Kid Gloves		More Tricks and Tips14.95		1	Cumana 3.5" Disk Drive99.
Pacmania	6.90	System Programs32.95	FURRY MOUSE COVERI	6.90	Senator 3.5" Disk Drive89.
Pac Land		Amiga DOS Inside and Out18.95	(With eyes, ears and nosel)		
Triad II		Disk Drives Inside and Out27.95			512K RAM expansion59.9
Tower of Babel	9.90	Disks for above books13.95	Mouse Mat	5.90	+ It came from the DesertI + 4 1MB demo disks1
Deluxe Strip Poker	9.90	DISKS for above books13.95	Keyboard or Monitor cover	9.90	
Centrefold Squares	9.90	ROM Kernal manual28.90	Naksha Mouse	34.90	Bootselector14.
Romantic Encounters	9.90	Hardware Reference manual19.90	Ontinal Maura (Cumorhi)	34.90	Hardware Virus protector

All prices include VAT and FIRST CLASS POST!
GUARANTEED RETURNS OF POST DELIVERY ON ALL STOCK ITEMS!



DEPT AF, 6 MUMBY CLOSE, NEWARK, NOTTS NG24 1JE

Cheque, postal orders or credit card facilities are available







Oh dear! Who's been a naughty Cyberspace Hacker, then?

he year is 2058. Technology has improved so vastly in the last 20 years that every association and company is linked into a common computer network. The centre of the world's technology scene is Tokyo, particularly an area known as Chiba City. This is where the Cowboys hang out.

Cowboys are 21st Century hackers, using state-of-the-art machines called Cyberdecks to 'iack' into the alternate reality that houses the mega-corporations' computer systems. This place is Cyberspace. Fortunes can be made by someone who's expert at travelling in Cyberspace, but the risks are costly. One false move can result in death.

In Neuromancer you play a down-and-out cowboy who has lost access to Cyberspace, lost his money, lost his deck and is fast losing credibility in the hacking world. You awake with a groggy head in a run-down bar called the Chatsubo. From here you have to find your way around Chiba City, attempting to recover your deck and find enough information and equipment . to upgrade Cyberspace entry level.

Walking around Chiba City is achieved by moving a cursor around the screen so that it points in the direction you want to go, then holding the button. When you find someone, you can select an option from a series of bubbles to speak to them. Only by planning conversations carefully will you glean anything from the inhabitants of the city.

You can also access computer matrices with a deck (once you have one), which could either give you money or useful information to help you further in the game. Upgrade enough and you can regain your status as a top Cowboy and solve the mysteries being perpetrated by the conglomerates in Cyberspace. Maff Evans



Feeling dry? Then pop into the bar for a drink and a chat!



One of the main charms of William Gibson's book and the whole genre is the dark, oppressive and generally run-down atmosphere that it evokes. Unfortunately, although Neuromancer the game has some nicely drawn and animated screens, the atmosphere of the whole thing is much too pristine. Where are the rough grebo styles? Where are the deteriorating buildings retro-fitted with new hardware? Where is the shady, smoggy feel of a high-tech city? Left out, it seems. The sound does little to back up the atmosphere either, consisting of a few weak tunes and the odd thin spot effect. The presentation does its job - but unfortunately, that's about all.



The proprietor of this bar drives a pretty hard bargain!



Check out the bulletins, they could provide some useful info.



■ Mouse

ELECTRONIC ARTS £24.99

Try telling this guy that arcades are trivial and there'll be trouble!

eah. You must be MAFF. got your chip here for ya. You're in the Gentleman Loss 11/16/58

Stick to the right bars and the girls there may help you out.

having been around on 8-bit for some time) has an original edge. The gameplay is involving and should have role players struggling through for some time. Fans of the original book may be disappointed, however, since the atmosphere is rather removed from the gloomy scenes evoked by the novel. Nevertheless, Neuromancer is still a more than reasonable adventure and stretches the old grey matter for a good while.



LASTING INTEREST

As is the way with most roleplaying games. Neuromancer has a fair amount of depth to the gameplay. The clues help you gradually find your way through, but a great deal of thought and memory are required to make it all the way. It will be some time before you manage to get past the problems in Chiba City and jack into Cyberspace, and since Cyberspace is where the serious gameplaying begins, it will still be quite a while before you complete the game.

JUDGEMENT

Up until now, there has been little in the way of Sci-Fi Amiga RPGs for techno-buffs to get their teeth into, so Neuromancer (despite

THE POWER BREAKS THROUGH...

ACTION REPLAY TM

ONLY POST FREE



THE WORLD'S **MOST POWERFUL** FREEZER-UTILITY CARTRIDGE IS HERE

JUST LOOK AT THE UNMATCHED RANGE OF FEATURES

- AMIGA ACTION REPLAY SIMPLY PLUGS INTO THE EXPANSION PORT OF YOUR AMIGA 500 AND GIVES YOU THE POWER TO FREEZE MOST ANY PROGRAM, THEN YOU CAN:-
- SAVE THE ENTIRE PROGRAM IN MEMORY TO DISK Special compacting techniques enable upto 3 programs to fit on one disk. Unique FDOS power means that the programs reload at upto 4 TIMES FASTER than Amiga Dos even independantly of the cartridge.
- UNIQUE INFINITE LIFE/TRAINER MODE Allows you to generate more and even infinite lives, fuel, ammo etc. Perfect as a trainer mode to get you past that "impossible" level. Very easy to use.

SPRITE EDITOR

The full sprite editor allows you to view/modify the whole sprite set including any 'attached' sprites.

VIRUS DETECTION

Comprehensive virus detection and removal features to protect your software investment. Works with all presently known viruses.

SAVE PICTURES AND MUSIC TO DISK

Pictures and sound samples can be saved to disk. Files are IFF format suitable for use with all the major graphic and music packages.

SLOW MOTION MODE

Now you can slow down the action to your own pace. Easily adjustable from full speed to 20% speed. Ideal to help you through the tricky parts!

RESTART THE PROGRAM

Simply press a key and the program will continue where you left off.

FULL STATUS REPORTING

At the press of a key now you can view the machine status. Including Fast Ram, Chip Ram, Ramdisk, Drive status, etc.

PLUS THE MOST POWERFUL MACHINE CODE FREEZER/ MONITOR

- MORE FEATURE THAN YOU COULD EVER NEED. HERE ARE JUST SOME;
 Full M68000 Assembler/Disassembler Full screen editor Load /Save block Write string to Memory
- Jump to specific address Show Ram as text Show Frozen picture Play resident sample Show and edit all CPU registers and flags Calculator Help command Full search feature Unique Cutom Chip Editor allows you to see and modify all chip registers-even write only registers

- Disk handling show actual track, Disk Sync pattern Etc.

 Dynamic Breakpoint handling
 - Show memory as HEX. ASCII. Assembler, Decimal Opport Assemble / Disassemble.

REMEMBER AT ALL TIMES YOU ARE INTERROGATING THE PROGRAM IN IT'S "FROZEN" STATE WITH ALL MEMORY AND REGISTERS INTACT.-INVALUABLE FOR THE DE-BUGGER OR JUST THE INQUISATIVE!

HOW TO GET YOUR AMIGA ACTION REPLAY...

TELEPHONE (24 Hrs) - 0782 744707 - CREDIT CARD ORDERS ONLY

WE WILL DESPATCH YOUR ORDER QUICKLY & EFFICIENTLY TO ENABLE YOU TO START RECIEVING THE BENEFITS OF YOUR PURCHASE WITHIN DAYS, NOT WEEKS. ORDERS NORMALLY DESPATCHED WITHIN 48Hrs

ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO ..

DATEL ELECTRONICS LTD.,

GOVAN RD., FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND TECHNICAL/CUSTOMER SERVICE 0782 744324



BATEL-ELECTROPICS



AMIGA PRO SAMPLER STUDIO II

+ DATEL JAMMER

STEREO SAMPLING

• A top quality stereo sampling system at a realistic price.

 The NEW Sampler II software has been completely re-written in 100% Machine Code and incorporates faster routines, bigger displays and a host of new editing features such as Cut, Copy, Insert, Replace, Mix, Erase, etc.

Seperate zoom windows and controls for left and right channels.

Multi-bank facilities for 1 Meg users. • Stereo lock control for ease of use.

Adjustable trig record level and sound monitor.

Seperate buffer for editing waveforms and improved wave-editor with instant update.
 Save files in Raw or single, multi-octave IFF format.

Envelope control panel for ramping up and down re-scale amplitude,
 noise filter and scan waveform.
 On screen display of filenames
 sample rate, length, etc.

• Inputs for microphone or line 1/4" jack and DIN connections

ONLY £79.99 PLEASE STATE A500/1000/2000



GENISCAN GS4500 AMIGA

An easy to handle Handy
 Scanner featuring 105 mm scanning

width and 400 dpi resolution enables you to reproduce graphics and text.

- Adjustable switches for brightness/contrast levels. Printout for Epson compatibles.
- Powerful partner for DTP that allows for cut and paste editing of images etc.
- Geniscan gives you the ability to easily scan images, text and graphics.
- Save images in suitable format for most leading packages including PHOTON PAINT, DELUXE PAINT, etc.
- Package includes GS4500 scanner, Interface and Scan Edit software.
- Unmatched range of edit/capture facilities simply not offered by other scanners at this unbeatable price.

SPECIAL OFFER COMPLETE WITH PHOTON PAINT FOR ONLY £169.99 INCLUDING HARDWARE/SOFTWARE



512K RAM EXTENSION CARD

- If you can obtain your own Ram chips, we can supply the card.
- Accepts 16 x 41256 D Rams.
- Available with/without clock option.
- Switch disable feature.

ONLY £19.99 ONLY £29.99

FOR VERSION WITH CLOCK/CALENDAR N.B. THESE PRICES DO NOT INCLUDE RAM CHIPS.

REPLACEMENT Mouse



- High quality direct replacement for mouse on the Amiga.
- Teflon glides for smoother movement.
- Rubber coated ball for minimum slip.
- Optical system counting -500/mm.

Special offer - free mouse mat + mouse house (worth £7.99)

ONLY £29.99

EXTERNAL 3.5" DISK DRIVE



- Top quality fully compatible drive mechanism.
- Throughport allows daisy-chaining other drives.
- 1 meg unformatted capacity.
- Good length cable for positioning on your desk etc.
- Comes complete with its own On/Off switch.

NEW LOW PRICE ONLY £74.99

NE

BOOT BLOCKER

- NOW YOU CAN END YOUR VIRUS PROBLEMS!
- Plugs into Amiga Disk Drive Port.
- Protects both internal and all external drives from virus damage.
- Switch to enable/disable protection.
- Can be left permanently installed.
- Works to with all known Boot Block Viruses.
- Start to protect your software investment now.

ONLY £14.99



MIDIMASTER

- Full Midi Interface for A500/1000/2000 (please state model).
 Midi In Midi Out x3 Midi Thru.
- Compatible with all leading Midi packages .
- Fully Opto isolated.

ONLY £34.99 INC. 2 FREE MIDI CABLES

MICROMIDI

Fully compatible Midi
Interface for A500/2000.
Midi In - Midi Out - Midi Thru.
Fully Opto isolated.

ONLY £24.99



HOW TO GET YOUR ORDER FAST...

TELEPHONE (24 Hrs) - 0782 744707 - CREDIT CARD ORDERS

WE WILL DESPATCH YOUR ORDER QUICKLY & EFFICIENTLY TO ENABLE YOU TO START RECEIVING THE BENEFITS OF YOUR PURCHASE WITHIN DAYS, NOT WEEKS.

ORDERS NORMALLY DESPATCHED WITHIN 48 Hrs. UK ORDERS POST FREE/EUROPE ADD £1/OVERSEAS ADD £3. PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS AND SUBJECT TO CHANGE WITHOUT NOTICE. CALLERS WELCOME - Please reserve goods by telephone prior to visit. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO...

DATEL ELECTROPICS LTD.,

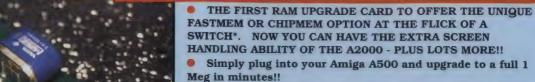
GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND TELEPHONE SALES ONLY 0782 744707 FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

-More Memory Power!

NOW YOU CAN ADD AN EXTRA 512K OR EVEN 1.5 MEGS TO YOUR AMIGA A500

UNIQUE FASTMEM/ CHIPMEM OPTION*





• Features the latest 1 Meg DRams. Low chip count means very low power consumption.

 Top quality high grade PCB and connector to give unmatched reliability.

Switch to enable/disable plus "ChipMem" option*.

Now you can run ALL Amiga 1Meg programs.

Also available with clock/calendar option.

 Easily fitted into the slot under your A500 - does not affect warranty.

ONLY £44.99 STANDARD VERSION £54.99 FOR CLOCK VERSION

RAM-MASTER II™

- IF YOU NEED EVEN MORE POWER THEN THE RAM-MASTER II™ IS FOR YOU!!
- Adds an extra 1.5 Megs to your A500 (giving a total free memory of 2 Megs).
- Uses the latest 1 Meg DRams resulting in extra low power consumption.
- Switch to enable/disable.
- Complete with onboard clock/calendar.
- Top quality connections used throughout.
- High grade PCB.
- Easily fitted into the slot under your A500 requires no soldering (the cover of your A500 must be removed for fitting "plug in" connector #)

ONLY £129.99 WITH 1.5 MEGS OF RAM

ONLY £39.99 FOR CARD WITHOUT RAM





*CHIPMEM OR FASTMEM OPTION WITH FREE 1 MEG OR 2 MEG DEMO DISKS

- Yes, if your Amiga was bought in the last 12 months and has KICKSTART 1.3 then it probably has the 'fatter' 1 Meg AGNUS Chip. Even though this was not publicised by Commodore, those machines with the '02' AGNUS, have 1 Meg Chip Ram ability. Both the PRORAM PLUS™ board can be configured to give 512K of extra Chip Memory instead of Fast Memory at the flick of a switch.

 Switch Suprementation

 Switch Suprementation

 Switch Suprementation

 Supreme
 - With 1 Meg of Chip Memory you can do lots of things previously only available on the A2000 more HiRes screens, multitasking graphics programs, CAD, DTP, larger sound samples, etc., etc.
 - Remember, no other cards offer this unique feature.
 One simple soldering job is required to enable the "ChipMem" feature.
 - simple soldering job is required to enable the "ChipMem" fe # Opening your A500 may invalidate your warranty.

EVEN IF YOU DON'T HAVE THE LATEST AGNUS CHIP THE PRORAM PLUS™ WILL STILL GIVE YOU THE FASTRAM OPTIONS OFFERED BY OTHER BOARDS AND AT AN UNBEATABLE PRICE · YOU JUST CAN'T BEAT THESE DEALS!!



HOW TO GET YOUR ORDER FAST...

TELEPHONE (24 Hrs) - 0782 744707 - CREDIT CARD ORDERS



WE WILL DESPATCH YOUR ORDER QUICKLY & EFFICIENTLY TO ENABLE YOU TO START RECEIVING THE BENEFITS OF YOUR PURCHASE WITHIN DAYS, NOT WEEKS.

ORDERS NORMALLY DESPATCHED WITHIN 48 Hrs. UK ORDERS POST FREE/EUROPE ADD £1/OVERSEAS ADD £3. PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS AND SUBJECT TO CHANGE WITHOUT NOTICE. CALLERS WELCOME - Please reserve goods by telephone prior to visit. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO...

DATEL ELECTROPICS LTD.,

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND
TELEPHONE SALES ONLY 0782 744707 FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

A NEW WORLD OF POWER

THE ANSWER
TO YOUR
DISK
DUPLICATION
PROBLEMS

FOR ONLY

£34.99

THE

- SYNCRO EXPRESS IS A HIGH SPEED DISK DUPLICATION SYSTEM THAT WILL PRODUCE COPIES OF YOUR DISK IN AROUND 50 SECONDS!!
- Syncro Express requires a second drive & works by controlling it as a slave device & ignoring the ST or Amiga disk drive controller chip whereby high speeds & great data accuracy are achieved.
- Menu driven selection for Start Track/End Track up to 80 tracks. 1 side, 2 sides.
- Very simple to use, requires no user knowledge.
- Also duplicates other formats such as IBM, MAC etc.
- Ideal for clubs, user groups or just for your own disks.
- No more waiting around for your disks to copy.
- Probably the only duplication system you will ever need!

THE LATEST CUSTOM LSI CHIP TECHNOLOGY

By using an on-board Custom LSI Chip, Syncro Express has the power to transfer an MFM image of the original disk directly to your blank disk - quickly, simply and without any user knowledge. One external disk drive is required*.



SYNCRO EXPRESS IS AVAILABLE FOR BOTH THE ST AND AMIGA SYSTEMS PLEASE STATE WHICH REQUIRED WHEN ORDERING

WARNING 1988 COPYRIGHT ACT WARNING

Datel Electronics Ltd., neither condones nor authorises the use of it's products for the reproduction of copyright material.

The backup facilities of this product are designed to reproduce only software such as Public Domain material, the users own programs or software where permission to make a backup has been clearly given It is illegal to make copies, even for your own use, of copyright material, without the express permission of the copyright owner, or the licencee thereof.

If you don't have a second drive we can supply SYNCRO EXPRESS together with a drive for

ONLY £104.99 (AMIGA) ONLY £119.99 (ST)

HOW TO GET YOUR SYNCRO EXPRESS II

TELEPHONE (24 Hrs) - 0782 744707 - CREDIT CARD ORDERS

WE WILL DESPATCH YOUR ORDER QUICKLY & EFFICIENTLY TO ENABLE YOU TO START RECIEVING THE BENEFITS OF YOUR PURCHASE WITHIN DAYS, NOT WEEKS.



ORDERS NORMALLY DESPATCHED WITHIN 48 Hrs. ALL CHEQUES POSTAL ORDERS MADE PAYABLE TO...

DATEL ELECTRONICS LTD.,

VISA

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND TECHNICAL/CUSTOMER SERVICE 0782 744324

17 Bit Software

That Bit Better Than The Rest!!

PO Box 97, Wakefield WF1 1XX, England. (40924 366982) The UK's Largest Amiga Only PD User Group, over 650 Top Quality Public Domain Disks and over 13,500 members in our friendly club

PD PACKS !! PD PACKS !! PD PACKS !!

GRAPHICS PACK!!

Over 90 Brilliant screens featuring some of the best in Amiga Art. Features many artistic styles: Fantasy, Handdrawn, Ray-Traced, Colour-Cycling, Digitised etc...

7 Disk Pack - £11.00

ADULT PACK!!

Seven disks for the more mature Amiga owner (i.e. OVER 18'S ONLY!!) Featuring slideshows of lovely ladies in various states of undress and in animation.

7 Disk Pack - £11.00

MUSIC PACK!!

These disks really show off the Amiga's sonix capabilities. Loads of tunes covering just about the best in Amiga music! Remember, they sound even better blasting through your hifi!!

7 Disk Pack - £11.00

FREE LIFE MEMBERSHIP WITH ANY OF THESE PACKS!!

DEMO PACK!!

Some amazing examples of Amiga coding at it's best! Various demos, intros, megademos and animations. All go to show why the Amiga is the number ONE home computer!

7 Disk Pack - £11.00

ONE MEG PACK!!

A pack of disks for Expanded Amiga's only. Featured here are some of the greatest Amiga demos ever. Some awesome animations that'll leave you speechless!

7 Disk Pack - £11.00

GAMES PACK!!

Sick of paying over the odds for the same old games - try our games pack, seven disks crammed with loads of popular PD games; shoot-em-up, puzzle games, RPG's etc! Brilliant value.

7 Disk Pack - £11.00

MEMBERSHIP - Are YOU a member of 17 Bit Software? The UK's largest, friendliest Amiga club going? NO? Why not? We offer THE BEST service, THE BEST PD, THE BEST prices. Join today with the mind blowing QUICKSTART PLUS PACK. 2 newly updated Disks of Various PD Programs/Demos, a Catalogue Disk and the latest issue of our popular Disk Update!

ALL 4 DISKS PLUS LIFE MEMBERSHIP - JUST £6.50!!!

MEGADOS

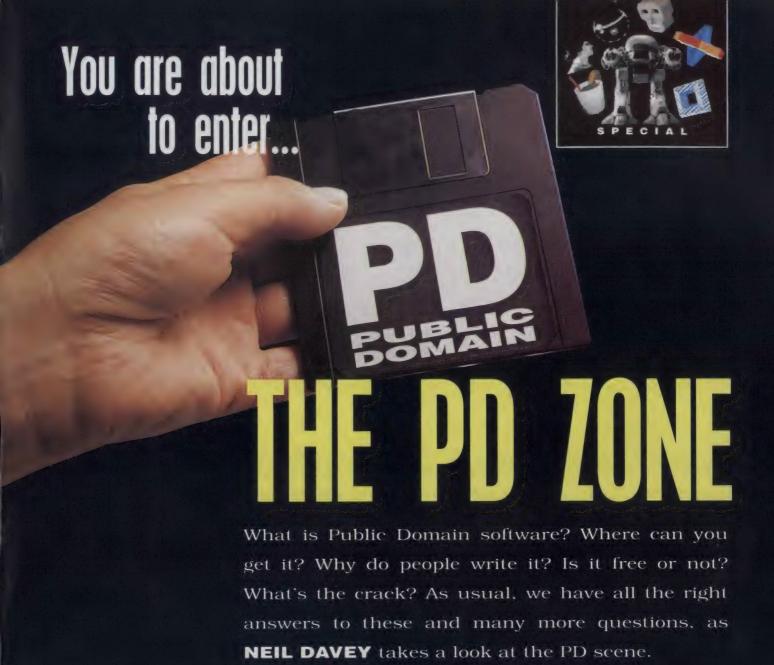
Megados is an AMIGADOS Manualon-Disk designed to be an easy to use Self Help reference and tutorial for understanding the CLI and the WORKBENCH, and the background to AMIGADOS.

MEGADOS

THE AMIGADOS MANUAL ON DISK - FOR LEARNING HOW TO REALLY USE YOUR AMIGA!!

AVAILABLE NOW ONLY £6.95!

Please send me the fol	lowing goods (tick the packs you require):	
GRAPHICS PACK	PERVIE PACK MUSIC PACK	
DEMO PACK	1 MEG PACK GAMES PACK	
MEGADOS	QUICKSTART PLUS PACK	
Already a 17 Bit me	mber? Please quote your membership nur	mber
here		
Name:		
Address:		
Total money enclosed	l: £Method of payment:_ ue/Postal Order or Credit Card Details!! Visa/Access orders welcon	
the phone. Telephones manned un	til 8 pm Monday to Friday.	ne over



he trouble with having a brilliant graphics and sound computer is that you have to feed the darn thing. And this, as you've no doubt discovered, is an expensive business. But fortunately for the tight (or empty) of pocket there is a way to feed your Amiga without selling your shirt. Public Domain, or PD.

Now then, Public Domain is just what it says; it's software which is in the public domain, or to put it another way, copyright free. The thing is, you can get a copy of a PD program either by buying it, or you can copy it from anyone if they have it, and you'll be perfectly legal. There's no copyright to infringe, see?

Why do they do it?

What kind of man spends weeks thinking of an idea, typing a program in, testing it, correcting the mistakes, compiling, debugging, testing, and all the rest, only to give the program away at the end of it? They must be out of their tiny minds, right?

Nope, wrong. they're just really into the machine, mate. The kind of people who release a program into the public domain are people who want to see their name in lights, or people who earn enough from programming serious software not to need the money (or indeed all the hassle of marketing a program) themselves.

Or sometimes they do a simple program and it grows and grows with each revision into something similar to a professional program. Or maybe they write a demo, just to show off just how flippin' skilled they are. Either way, the idea is to get a program to you and not make any dosh out of it, and it's just because they love to do it that they don't expect any pay-off.

Two of a Kind

There are basically two types of PD software: utilities (utils) and demos. Utils are where a guy will write a program for his own use and distribute it

to his friends to use too. It might be a conversion program for converting graphics from one format into another. Or it might be a program which does something to disks to

mend them if they get errors on, or optimise them so they run better. Anything like that.

Either way, the utility writer knows that the commercial viability of the program is zero, but by putting it into the public domain he will become famous and his name will be spoken in hushed tones the world over. Most utils start up as freeware and end up as shareware, where the user pays for updates etc.

Demos have a far more sinister past, but serve a similar purpose – making their makers famous. Once upon a time there was a computer called the Commodore 64 – yes, it's a long way back, but bear with me, all right? Anyway, so there were certain people who, for fun or profit, cracked the copy protection on games and



The logo of Scoopex, just one of many demowriting crews around.



called themselves crackers. (Judges and policemen have other names for them, 'criminals' mainly, but sometimes 'felons', 'jailbirds' and repeat offenders are called 'recidivists'.)

Anyway, they cracked the games and compiled them all onto one disk with a little intro on the front with silly names, like the MaxPax, Animal Crackers, The Cracksmen etc. These intros were just simple screens with text on and with a bit of music,

RIGHT: The Starship animation is a classy example of a raytraced squence.

BELOW: Humour abounds on the PD demos scene. If you can do this with your nose, let us know... send a fee, usually quite small, between £5-£25 or something like that, to the author. Shareware is normally of slightly higher quality than PD or freeware, and sometimes the authors are expecting to earn quite a lot out of it.

Some PD authors do in fact make a bit of money out of shareware, which is a very nice, mellow and Californian way to go about things. In spite of the fact that quite a lot of people are bound to use shareware without paying the fee, there are benefits, like upgrades, documentation and contact with the author. Registered users get newer versions automatically in most cases, as well as printed manuals.











perhaps. Then, more and more, as they hacked the games and programmed the intros they got so good at coding they forgot the cracking completely and concentrated on the intros themselves.

About the time that demos were born, the Amiga came along and the already thriving demo industry turned its attention to this new machine. The intros of various cracking teams were gathered onto disks by new coders, who then put their own demos on the front of those. The megademo was born, and nowadays these often stretch over up to three disks!

And so to the present, where demos form the lifeblood of PD, and are a whole new artform. It goes like this: a guy buys an Amiga, and begins collecting demos. He compiles disks of other coders' PD demos and does his own intro. Then he gets so good he joins a coding 'team' and codes some stunning megademos. Then the team do a totally stunning demo and then promptly sink from sight. They are next seen coding games and programs for commercial companies. Quite a lot of commercial companies take notice of demos, and you'll find a lot of popular games coded in Europe are done by ex-demo artists.

What-Ware?

To confuse the issue still further, not all PD is totally free – in other words, it is not all the type of free software called 'freeware'. There are different varieties, but mostly the non-free type is 'shareware'. This means that you can try out the software for a while and if you like it you are supposed to

BELOW: Star Trek is a dominant theme, especially for demowriting Trekkie Tobias Richter.

FAR RIGHT: A whole heap of assorted demo themes, from digitised Madonnas to raytraced wooden dogs. A motley crew! Although this process very rarely works, due to the innately mean nature of mankind as a whole, there are some interesting and sometimes just plain bonkers variations. 'Beerware', for example, was a concept whereby if the user got a lot of use out of the program he was to send a six-pack of beer to the author! Now there's an idea we have a great affinity with... cue daydream... nice pub garden, sunny day – Editor looming across the lawn carrying an axe... (Oi, get on with your work! – Ed).

The Best in PD

So what's hot and what's not in the PD field? There are certain disks which are useful, some which are just fun and some which are just amazing. There are great utilities which every Amiga user no matter how technical

must have, like *Disksalve*, and some which are nice little twiddles which make life easy, like *SID*. Here is our definitive list of PD items which have caught our eye, and this should give you a taste of what's around so you can start your own PD collection.



Demos as we know them today originated as either music or graphic animation demos. In the early days, demonstration versions of certain proprietary graphics programs were favourite, especially the likes of *Videoscape 3D* by Aegis. Exponents of this particular program were few and far between, because it takes a certain type of mind to operate a program as complex as *Videoscape*. But some did, and indeed still do.

Originally all the very best Videoscape animations were either by Allan Hastings (the author of Videoscape) or Leo Schwab. Leo was a real Amiga character, often to be seen at shows wearing a velvet cape and looking decidedly odd. The story of how the Berserk animation came about is probably an interesting folk tale based on real events, but here's the way I remember it.

At one particular show, they showed a video of the now-famous Pixar cartoon *Red's Dream*, where a unicycle is seen juggling some balls. This was great, thought Leo, and so he went back to his hotel room, where of course he had his trusty Amiga set up, and had a late night hack attack. Next morning he proudly showed off his own version of the unicycle juggling the balls.













Rather than being congratulated by Pixar for his cleverness he was severely reprimanded for copying a Pixar trademark. More than slightly miffed about this, Leo went back that night and changed the animation to be an Amiga 'boing ball' juggling three unicycles. The next morning the animation was on every stand at the show, and there was absolutely nothing Pixar could do about it.

After that Pixar came in for a lot of stick, and even Allan Hastings had a pop with his *Car* animation. A unicycle strays across the road in that path of a famous Allan Hastings object, the red Lotus sports car. More recently, a German bloke called Tobias Richter has popularised *Videoscape* once more, with a huge mound of *Star Trek* animations like the amazing *Fleet Maneuver*.

Only in the last few months, though, Tobias has paid tribute to Allan Hastings with his brilliant Chase animation. A road full of Allan Hastings Lotus objects stretches out before us, and a police car chases another car through the traffic. The cars are all Allan Hastings' original design except for the police car, which has a flashing siren on the top. It's not going to be long before a new program comes along to oust Videoscape as the primo program, but until then there will be plenty of people willing to work out their 3D objects on graph paper!

GAMES

Many writers try their hands at games, and I'm not quite sure why these products are not sold commer-

cially, as they are usually very high quality. Steinschlag is a version of the popular falling brick game, Tetris, and a very good version it was too. Shame about this one is that the owners of the copyright to Tetris have recently clamped down on this otherwise perfectly legitimate copy, so the likes of Fred Fish have been asked to excise the games from their libraries. Ours is not to reason why, I guess.

Another game which has its roots in commercial products is *Battle Force*. This is a very complex game based on the popular *Battletech* fighting robots Role Playing Games by FASA. You may recall that Infocom and Activision had a crack at doing *Battletech* games recently, with good but not wholly great results. This version is very much closer to the actual role playing game itself, and will satisfy any real *Battletech* buff for realism. A tad complicated for your average point and shoot merchant, but a real corker for the strategists.

Tobias Richter also made a game, with a predictable Star Trek bias, and very good it was too. There is also the most stonking Star Trek trivia game too, (called Trek Trivia) with over nine data disks of the hardest questions ever asked on Star Trek. As there are no Trek games on the Amiga except in the PD, these are essential playing for the Trekkers among us. (Beam me up, Scotty).

There are so many games it's impossible to talk about them all, but there are literally types for all tastes. Text adventures, graphic adventures, 3D vectors, arcade games, puzzle games, you name it.

FRED FISH

Many of the games and utils I've mentioned are gleaned from the Fred Fish Disks. Fred has been collecting PD and releasing it since time began (about 1985) and now has about 400 disks of utils, games, and generally neat stuff, Amigawise. His disks are available from all the major libraries in the UK, and form the backbone of many a power PD collection.

To see what's on the Fish Disks, try a copy of Aquarium, which is a nice PD database system specially created for the Fish Library and tells you everything you need to know as well as letting you search for certain types of program.

GRAPHICS

There are a great many graphics utils on the Amiga, and in most cases a program can be found to do almost any task you want – to create new graphics, turn graphics from one form to another and even to subtly transform or treat them in some way.

Tracer is a PD ray-tracing program which, although quite limited in what it can portray, actually has some very powerful features. You can map

IFF graphics onto the surfaces of objects as you trace them, creating some very lifelike effects.

Claz and IFF2PS are two, quite different, programs which convert normal IFF files into Postscript files. Postscript is a graphics definition language designed by Adobe Inc and what it means is that instead of being a graphic representation of the picture you want, like the IFF bitmap type picture is, the file is actually a set of instructions for the printer to draw the picture. So the file is a text based list of instructions rather than pixels. Spooky, huh?

Why would you want to do this? Well, the quality of the output you get from a Postscript laser is about

6,000,000 times better than what you'd get on your scratty old Epson 9 pin, that's why.

On the American bulletin board service, Compuserve, they came up with an interesting idea for graphics, whereby graphics for all formats were converted to a common format for downloading, called GIF or Graphics Interchange Format. More and more GIF files re finding their way onto UK boards, and so the programs HAMGIF and AmiGIF now have more relevance than they did about 6 months ago.

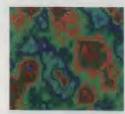
With these programs you can convert GIF files to HAM and any IFF file to GIF. This means that files meant for other computers can be used in Amiga programs. Pretty wild, huh?

And finally there are out and out converters, one of the most useful of which is *MacView*. This allows you to take a *MacPaint* art file and convert it to an Amiga IFF file, giving you access to one of the world's biggest libraries of graphics. So like I say, think up a way you'd like to tinker with your graphics, and there'll be a PD program to do it, guaranteed.

DISK UTILS

For the more techie amongst you there are a whole pile of useful programs for doing various tasks which otherwise would be impossible.

NewZap is a handy disk util which lets you examine and alter the contents of a file at will. Using this you can dive into a file and alter the text which appears, in a scrolly message for example, or even more funnily in the high score table of a game! This is easier in older, more badly-programmed games, but just think of

















EXPERIENCED

BEAT THIS AMIGA PD

RELIABLE

Free Club Membership
Write now for details of July/August FREE PD DISK offer

ANY OF OUR PD DISKS FOR ONLY £1.75

 ↑ 1 - 4 Disks £1.75
 ↑ 5 - 9 Disks £1.70
 ↑ 10 - 24 Disks £1.60
 ↑ 25 + Disks £1.50 We have several Special Offer Packs at low prices

e.g. A Home Business Pack (8 disks) only £12.99
A Sonix music pack (5 disks) £7.99 3 Star Trek demos and game pack - 1 meg (6 disks) £9.50

Prices include 1st Class P&P. Orders nearly always despatched the Same Day. Send a S.A.E. for a copy of our PD software lists. Make Cheques Payable to:

EVALUES

BEAT THIS AMIGA P.D. Ayrshire KA10 6LE, Scotland FAST & EFFICIENT

NOW ONLY £1.50 PER DISK! HERE IS A SMALL SAMPLE OF OUR SOFTWARE:

Outsiders Acid Demo: A great demo disk containing a BRILLIANT video!	(1)
Digital Concert 4: 3 great digitally sequenced tracks, the best yet	(1)
Kefran's Megademo 8: The best ever megademo. Better than Red Sector	(2)
Scoopex Mental Hangover: Amazing Filled Vectors and haunting music	(1)
Electric Blue "Bra-busters": Excellent b/w digi-animations. Cert. XXX	(1)
Bodean's Movies: More naughty b/w digitised animations. Cert. XXX	(1)
All New Star Trek: A great new version by AGAtron. Great playability	(2)
JTS Music Ripping Disk: Lots of utils to rip the best music from demos	(1)
Home Business Pack: 3 disks containing a spreadsheet, wordprocessor and database.	
All come with instructions	(3)
JTS Soundtracker Compilation: Various versions of Soundtracker,	
plus 4 instruments disks. Great value!	(5)
OR WHAT ALOT BURY AG ED DICKE FOR CAG EQ (inclusive)	

SEND A BLANK DISK OR SAE FOR OUR FREE CATALOGUE ques or postal orders payable to ITS PD and then send your order to:

Sound

2 ASHFIELD, WETHERBY, LS22 4TF. TELEPHONE: 0937 83834

$\mathbf{E.M.P.D}$

AMIGA P.D. LIBRARY. OPEN 7 DAYS 9am - 9pm

E.M.P.D.L. STARTER PACK. A 3 disk collection of the most useful utilities including Database, Word Processors, Spreadsheet, Spelling Checker etc.

STAR TREK. The 2 disk game reviewed by Amiga Format. FISH GAMES. A 3 disk collection of the latest games from Fred Fish. TBAG GAMES. 1 disk with eight of the best games from the latest TBAG disks

T.V. GRAPHICS. 2 disk set of backgrounds and fonts for video

VIDEO APPLICATIONS. 2 disk set of video utilities to accompany T.V. Graphic

GRAPHICS MANAGEMENT. 2 disk set of graphics utilities zc. A "C" compiler based on the ST Sozobon C compiler. Fully functional complete with linker, assembler etc.

DEVILS KEY. A 3 disk megademo to end all demos. The very best. **BLACK BOX.** "Ride on time" demo.

POPEYE MEETS THE BEACHBOYS. Brilliant demo AMIGA EDUCATION SET. A 5 disk collection of Educational programs. Including Evolution. World Geography, Languages, Metric Conversion, Weather Forecast etc

KYLIE MINOGUE. 2 disk demo

MICHAEL JACKSON. Bad demo.

LEARN AND PLAY. 2 disk set of programs for the children.

Includes: Simple maths, Word Puzzles, a simple painting

program etc

MUSIC SET. A 5 disk music set containing 72 very good tracks. We are also authorised distributers for "NEWSFLASH"

The very best European disk magazine for the Amiga.

1 Meg upgrades - Limited period - £50

All our disks are virus free and despatched by first class post on day of receipt at the inclusive price of £2.50 per disk.

Write or phone now for our latest catalogue containing over 1000 disks.
Please state CLEARLY the make of your computer.



Cheques & P.O.'s payable to: E.M.P.D.L.



54 WATNALL ROAD, HUCKNALL, NOTTINGHAM, NG15 7LE. 0602 630071

_			
r	_		14.4
1	Demo	1	.Kefrens mega demo.
1	Demo	2	.RSI mega demo, 2 disks.
ı	Demo	3	Trilogy mega, 2 disks.
1	Demo	4	Predators, 2 disks.
1	Demo	5	Fraxion horror.
ı	Demo	6	Recoils POIPOI collection.
ł	Demo	7	New Tech 3.2 drives, 1 meg.
1	Demo	8	Recoils Cebit Collection.
١	Demo	9	Scoopex's Metal Hangover.
1	Demo	10	Rare demo.
1	Demo	11	Silents mega.
ı	Demo	12	.Anarchy demo.
ı	Demo	13	THR's Nostalger II.
١	Demo	14	Rebels mega.
1			Dragons mega.
1	Demo	18	Links mega.
1	Demo	19	Cult mega.
1	Demo	20	. Electronic Warriors Ancient Collection
1	Demo	21	Magnetic Fields Collection.
1	Demo	22	Pendle Eurropa Collection.
1	Demo	23	Magnetic Fields Collection.
١	Demo	24	RAF. 2 disks.
ı	Demo	25	Deathstar mega.
ı	Demo	26	Visions mega IV.
ı	Demo	27	Kefrens VIII
ı	Demo	28	Crionics mega.
ı	Demo	29	Static bytes.
ı	Demo	30	Crypto-burners II.
ı	Demo	31	Recoll Compilation 2.
ı			Recoll Compilation 3.
ı	Demo	33	Rebels demo disk.
ı	Demo	34	Mirage demo compilation disk.
ı	Demo	35	Silents demo compilation disk.
ı	Demo	36	Chaos and megadeth mega demo.
	Demo	37	Dawn mega demo.
ı	Demo	38	Aces Collection 1.
	Demo	39	Aces Collection 2.
	Demo	40	Mirage Hot Stuff 19 compilation.
	Demo	41	Vortex Mega demo 2.
	Demo	42	Madness demo.
	Demo	43	lan + Mick mega demo.
	Demo	45	Clapping World Demo.
	Demo	46	Alcatraz 3 disk mega demo.
	Demo	47	Mayhem demo.
			It's metal 2. Jokes etc.
			Holsten Pils ad.
			Millor Lito domo

Miller Lite demo. Sunrise Compilation 8.

Demo 55....Mirage demo disk 18. Demo56-73..are the THR compilation disks 1-17 Demo74-100..SAE demo disks 25-51

.. Darkstar demos 4

Demo 50 Demo 51

Vangelis music. 1 meg. Sound Sound Enemies music. Darkling Lords, Freddy mix Sound Subway music Sound Sound Recoil music disk Club Mix II. Sound Sound .Glidescope II Sound Flash Digital Concert III. Sound 10 .Vision Music. .Crusaders music disk Sound Flash Digital Concert IV. Sound Sound 13 .The Power Lords music disk. .Chaos + Megadeth music disk. Sound 14 .NWA music disk Sound .Get to the Safe House. (THR) .Outsides aceeeeid music disk. Sound 16 Sound 18 Glidescope III. Sound Sound 19 .lpec Elite music disk. .Freeked Out music disk Sound Sound Flash Digital Concert II. Sound .ITV music disk. Miller Lite ad demo Sound Fresh Cola music. 2 disks. Sound .D-Mob IV music. 2 disks. Sound 25 Sound 26 Flash music Sound 27 .Dark Star music

Titanix music. 1 meg, not 1.3

.Various useful utilities. Inc. Virusx4.0. .Various including QED. Util 3 .. Games music creator Various including med Util 5 .. ACU's graphics utility disk

DOWNSIDE, EPSOM **SURREY KT18 7HQ**

TEL: 0372 721939

- Compilation including Stoneage. Star Trek two disks. The Punisher product demo. The Holy Grail 1 meg adventure. Flashbier the mega game Game 1 Game 3 Game 4 Game 5
- Compilation including Ladybug. Star Trek, 3 disk version. Game 6

Game Game 8

Moria game.
Game compilation. Good.
Battlemech game compilation.
CC games pack 1. Good.
Agatron games. Game 11

Game 12 Game 13

Anim Space Ace demo. Anim 2

Walker 1.1 meg. Walker 2.1 meg. Anim Raytraced Birds, (flapping kind). Anim

Anim 5 Raytraced animations including Kanankas.

Puggs in space. 1 meg. Space Fighter. 1 meg. Luxo Teenager. 1 meg. Anim Anim Anim

Anim 9 Star Trek animations Anim 10 Gymnast animation.

Enterprise leaving dock. 1 meg. Anim 11 Anim 12 The Run. Police chase. 1 meg.

Car and unlcycle. 1 meg. Real things horses. Anim 13 Anim 14 1 MEG UPGRADES AVAILABLE Real things birds. Anim 15

.Elvira game demo. .Fractal Flight. Anim 16 Anim 17 A1500 product animation Anim 18

Knight & book animation. 1 meg. Anim 19

Anim 20 Comic on a disk. Good story

Anim 22 Anim 23 .Magician / Jogger amin. 1 meg .Agatron Star Wars X-wing anim.1 meg. Anim 24

Agatron anims 14.1 meg.

1 MEG UPGRADES AVAILABLE AT **CHEAP PRICES**

LOADS MORE DISKS AVAILABLE. PHONE FOR DETAILS (0372) 721939

ADULT DEMOS AVAILABLE CALL FOR DETAILS. **OVER 18's ONLY**

the effect on your friends! Okay, so that's fun, but what about a more serious problem? What happens if one day you boot a program and find that it is corrupted? Complete disaster, right? Nope. All you need is *Disksalve*.

All this is is a more complex version of the old favourite DiskDoctor that appears on your Workbench disk, only more effective to say the least. All you do is put a formatted disk in one drive and the broken disk in the other and type "Disksalve DFO: to DF1:" and off it goes for about 20 minutes, searching for busted sectors and mending them, sometimes making educated guesses about what should be there. It's totally brilliant, and it's free!

ICONMASTER

If there was an equivalent of *DPaint* for the creation of icons, then *Iconmaster* would be it. With this very well-made piece of kit you can create icons or edit existing icons, load *DPaint* brushes, and paint in what looks like eight colours using only four. It's a very solid little program and is certainly the best icon maker around in the PD.

FILE COMPRESSION

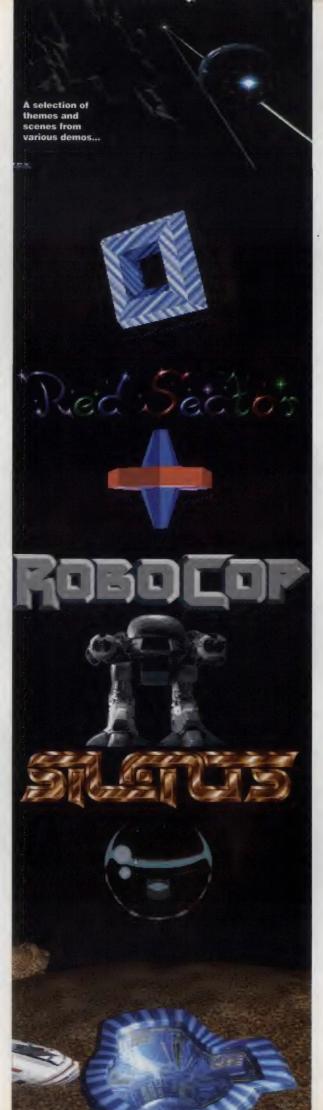
Sometimes programs take up too much room, there's no getting away from it. On bulletin boards it seemed like an idea (to save people's phone bills) if the files they downloaded were compressed in some way, so that the users could uncompress them the other end and get at the programs.

Many compression or archive programs were created for this very purpose, like Arc, Zoo, Lharc and Pkazip, and all are still in use today. If you use comms then these are essential utils for getting at programs you get from BBs.

But what if you want code to take up less space on your disks and yet you want to still use the programs? Then what you need is *Powerpacker*. This shrinks a program or file in a special form that means when you use it, it automatically unpacks itself and runs normally. *Powerpacker* is fast becoming the standard program for compression, so much so that the latest version is a commercial product. The original version is still available in the PD, though.

TEXT READERS

When you click on an icon called 'ReadMe' or something, the text you see is being displayed using a program like *Muchmore* or *PPMore*. These text readers take a normal ASCII text file and display it so you can read back and forth through it on screen, rather than printing it out. This means you can send text files with a program on the disk rather than on paper. Neat stuff, eh?





SID

One of the biggest bugbears about using an advanced computer like the Amiga is that in order to utilise some of the higher functions you need to use the flippin' CLI. This is a bit scary to some and just plain boring to others, so some nice guy came up with the idea of a PD helper, a little interface between you and the Amiga.

SID is the jobby I'm talking about, and with it you can look at picture files, hear sounds, do all sorts of file housekeeping like copying, renaming and deleting, do directories, make directories, wash up, dry up and put away, all in one easy-to-swallow capsule. (Er, where was I again? Oh yes...) SID takes all the graft out of handling disks, and no serious Amiga user should be without it.

FRACTALS AND CHAOS

One of the most popular demos to do is the fractal demo. Some, like *Turbomandel*, draw the Mandelbrot set in double quick time, far quicker than any program you could write for yourself, and in any resolution. This is the preferred fractal engine and using it you can make any fractal picture you like, and very beautiful they are too. Scenery on the other hand, is a program which draws fantastic fractal mountains, and it was so good that the new version is once again a commercial product.

SCREENX

Another screen util which nobody should be without is *ScreenX*. This enables you to shift screens around and even save them to disk as IFF files for later. Brought to you by the maker of one of the world's favourite (wait for it, wait for it)...

...VIRUS KILLERS

Otherwise known as *VirusX 4.0*. The virus is one of the biggest problems facing Amiga owners in the Nineties. You really should have one, and use it every week, especially when you get some new demos etc. Make sure your system is clean before you put anything in it. By far the best programs around are the type that check your system every time you boot, like *Check Vectors (CV)* or *Virus Hunt (vhunt)*. You simply insert the program in your startup-sequence and Bob's your uncle. Nothing can get through.

COMMS

Most of the programs used to communicate with bulletin boards down the phone line are PD, like AZComm,



Access! and JRComm for scrolling text based boards, and Supertex for videotex-type boards like Prestel. All mod cons, most of them, but unfortunately shareware in the main. There's a good reason for this, and that is that they are flippin' brilliant.

DEMO CITY

And so to the demos. (Phew!) Trying to name all the best demos is like naming all the stars you can see from Blackpool, but let's have a browse around what's been happening and give you an idea of what to look for.

Scoopex are a popular demo crew, and their "Mental Hangover" is a megademo par excellence. I guess it won't be long before these guys do their own games, and that will be great and a shame at the same time.

In the same way, the "COMA" demo is one of the very best music type demos, and it looks and sounds like an acid house video on the Amiga. The Rebels' "Subway" demo is nice too, as is the by now notorious "POI-POI" demo you may have seen all over the place at the 16-Bit Show.

Tobias Richter can be relied upon for a snappy *Star Trek* animation, so look out for those if you like sci-fi. Watch out for the "CeBIT" demo from Red Sector too, as that is one of the most original and best-coded demos I've seen for a long, long time. Also watch out for stuff by SILENTS as they have nice sense of design and always deliver good value.

The Crusaders are very good music coders, and their "Bacteria" demo is brilliant if you get a unbugged version. And finally, the "Horror Show" by Fraxxion is very horrible but very well done, being a bit of a video nasty on disk. There, that ought to get you going. Let us know your favourites, won't you?

Where Can I Get It?

The pages of computer magazines are FULL of ads from companies offering PD software, and because there is no copyright on the disks, there are more each day. You could set yourself up as a PD library simply by copying some PD disks and printing a catalogue. But you mustn't make too much money at it.

Some PD houses make a profit on what they sell, under the guise of 'carrying charges'. The usual charge is about £2.50-£3.00, which, even allowing for the price of a disk and postage and packing, still leaves a profit for the seller. Most reputable libraries charge only £1.50 to £2.00, so be warned.

If you want to get some PD disks:

• Look at the press and see PD

 Look at the press and see PD Library ads, or...

 Join a user group and feel the benefit of their library.

 You can even turn up to computer shows, and this is favourite with me, as you can try before you buy. Or...

 Find a mate who gets a lot of PD and copy his stuff.

 Buy a disk magazine which publishes PD on it and just lift the programs off it.







CUTE SCENES: The Cool Cougar, above, and the infamous POI-POI, below.





More simply, take a look at the large list of suppliers below, or browse through the following addresses. These are the people I buy from, and the service is first class.

NBS, 132 Gunville Road, Newport Tel: (0983) 529594

One of the UK's demo specialists. They stock a wide range of demos and new ones are coming in all the time. The price is very attractive.

17 Bit Software, PO Box 97, Wakefield, WF1 1XX Tel: (0924) 366982

Another entertainment specialist, with over 700 of their own disks, as well as the Fish Disks and other well-known libraries. Prices have recently dropped to £2.00 or any 10 disks for £18.00. One of the first PD houses to start publishing their own games.

George Thompson Services, Unit 1, Dippen, Brodick, Arran, Scotland Tel: (077082) 234

Veteran PD sellers, and distributors of all major PD libraries like Fish, TBag, and FAUG. Also agents for the disk magazine Jumpdisk, which never fails to amuse and delight.

Softville, Unit 5, Stratfield Park, Elettra Avenue, Waterlooville, Hampshire, PO7 7XN Tel: (0705) 266509

A nice, big, friendly family business, who are always much in evidence at the various Amiga computer shows. They publish a very slick catalogue, and carry the Fish Disks, Amicus, PAN, Slipped Disk and FAUG libraries as well as their own SOF library.

UKAUG, 144 Charles Street Leicester, LE1 1LB Tel: (0533) 510066

Very good national user group for Amiga, with an extensive membersonly PD service plus extensive discounts on hard and software.

ICPUG, Membership Secretary PO Box 1309, London, N3 2UT Tel: 081-346-0050

The Independent Commodore Product User Group is the oldest user group for ALL Commodore computers. They have a massive library for all tastes, demos or utils. Again members-only.

SUPPLIERS

The following companies all contribute to the distribution of Amiga public domain software in this country. For their full addresses check the advertisements in this issue of *Amiga Format*, or give them a ring on the numbers listed here.

George Thomson Services: 0770 82234, Amiga PD Library: 0742 750623, Capricorn Computers: 021 7070381, Seven Seas PD: 60 Canary Rd, Dungannon, County Tyrone, N Ireland, Magnetic Media: 0827 59566, EMPDL: 0602 630071, Blitterchips: 0535 667469, Kad-soft UK: 0249 817174, Amiganuts: 0703 785680, Purple PD: 0279 757692, Crazy Joe's: 0709 829286, Nova: 0295 262029, NBS: 0983 529594, Softville PD: 0705 266509, Sector 16: 0865 774472, Senlac Software: 0424 753070, Premier PD: 15 Croxteth Rd, Rainford, WCA 0792 772745, New Image PD: 40 Appleby Gardens, Dunstable, Bedfordshire, Beat This Amiga PD: 5 Fullarton Drive, Troon, Ayrshire, EPROM Services: Freepost, Leeds LS27 8YA, Scorpion Systems: 5 Lower Raven Lane, Ludlow, Shropshire, SY8 1BL, Sagittarian PD: 081 520 3858, Arakis PD: 20 Ashwood House, Victoria Road, Hendon, London NW4 2BD, Recoil PD: 1A Bern Close, Woodcote Side, Epsom, Surrey, KT18 7HU, Start Computer Systems: 091 564 1400 ext 206, Supervision: 0983 812867, Power Domain: 21 Sylvanus, Roman Wood, Bracknell, RG12 4XX, Deeper Domain: 081 204 3954.

Capricorn Computers



HIGH QUALITY AMIGA PD!

	HITCH GOME!	1 4
	GAMES	C
CCPD2	Canfield, Cribbage, Klondike, Othello	
CCPD3	3D Breakout, Backgammon, Clue, Cosmo-	CC
	roids, Missile Defense, Tunnel Vision	0
CCPD20	Amoeba Invaders, Adventure, Egyptian Run,	C
	Gravity Wars, Cycles, Triclops, Tic-Tac-Toe	C
CCPD37	Conquest, Hockey, Larn, Othello, Pegboard	C
CCPD50	AmigaMaze, Chess, GravAttack, Yelp,	
	Gravity Wars, Go-Moku	C
CCPD56	Hack (Lite)	
	,96 Star Trek (1 Meg +2 drives)	C
CCPD97	Flaschbier	
CCPD98	Wanderer, Cosmic Conquest, Yacht C,	C
	Four in a Row, Tetrix, Black Box	
CCPD103	Retaliator, Sorry !, PacMan87	C
CCPD130	Ballyll, Battleship !, Chess, SYS, Paccer	CO
CCPD137	Moria (1 Meg)	C
CCPD140	Tennis (1 Meg), Car	C
CCPD141	Escape from Jovi, Tiles !, LadyBug	C
CCPD158	Orbit 3D, Diplomacy, SYS	C

CPD196 AmigaMaze, Labyrinth II, Monopoly, Picture, Puzzles, Sky-Fight A Nice Day In The Maze, Bull Run, CPD207 CRobots, Wrap Trap Cards'o'Rama, JackLand, Rubik. CPD211 Steinschlag MechForce Cat & Mouse, Peter's Quest, ShootOut
ATC, Crystal Caverns, Dominoes
King's Korner, Solitaire,
MirrorWars, Obsess-o-Matic
Galactic Worm, Paranoids,
Machlo Side CPD264 CPD266 Marble-Slide H-Ball, The Turn, Tricky NEW DEMOS CPD302

CPD277 Deadly Jammin 2
CPD281 Digital Concert 3
Dragons Megademo 1
CPD285,286 Kefrens Mega-Demo VIII
CPD288,289 Trilogy Giga Demo
CPD290 Cult Megademo CPD277 Bacteria Gate Megademo 2 Mental Hangover Cue-X Music 3 CPD291 Asteroids, Blackjack, Hearts, Miniblast CCPD292
Puzz, Zerg, World, Daleks, Callisto, Pontoon CCPD301

This is only a small selection of our disks, we also have the best in Music, Utilities, Adult, Animations etc. with more disks arriving every day!

DISKS ONLY 62.50. OR 61.50 IF YOU SUPPLY YOUR OWN BLANKS UK P&P INCLUDED. EUROPE ADD 61.00 OUTSIDE EUROPE ADD 62.00 (AIRMAIL)

Please make Cheques/PO's payable to Capricorn Computers. And send to:-

CAPRICORN COMPUTERS

35 Warwick Road, Olton, Solihull, West Midlands. B92 7HS Tel. (021) 707-0381

Call or write NOW! for the latest list



Or call in at our shop at the above address where we also sell the best in Software & Hardware for the Amiga.

Domain

21 Sylvanus, Roman Wood, Bracknell, Berkshire. RG12 4XX Tel: (0344) 868977

FOR CHEAPER PUBLIC DOMAIN

AMIGA DISKS

BUY 10 AND GET ONE FREE

SEND SAE FOR FREE CATALOGUE

Prices inclusive of 1st class postage & packing

Arrakis Amiga Public Domain You've seen the rest, now check this out:

Any disk All inclusive of V.A.T. & P&P.

5-10 disks 1.05 11+ disks 0.90 DEDUCT 35p if you supply disk ADD 45p if TDK disk

No membership fee, free catalogue.FISH, AMICUS, TBYB, SACC, FAUG, PANORAMA, DEMOS + ANY

OTHER PUBLIC DOMAIN DISK

T.D.K. DSDD 8.00 for ten 100% Certified blank disks 4.50 for ten

80 Cap 3.5" disk box 5.00 Inclusive of V.A.T. & P&P

Send cheques/P.O.'s to. Arrakis, 20 Ashwood House, Victoria Road, Hendon NW4 2BD.

Send SAE for list

>>>>>> Sonix Songs, player/graphic screen **USON1** Duelling, Electric Dream, Wonderful + USON10 Human Power, Mindbreaker, Robocop +

********* Slideshows with background music 'Heroes' tune + 16 hi-res pictures Fantasy pictures by The Dark Lord **USLID1** USLID4

Music at it's best, with graphix **UMUS1** Ten original tunes, brilliant! UMUS13 Metromania, Sahara, Lonely + 3 others

Intro's and Demo's, the best OGD, PARTY!, EUROPE + 7 others TEARDROPS, MAGIC FIELD + 5 others ************ **UINT1** UINT4 UINT14 COMBINATION, SUBWAY, WEAPON + 4

Great GAMES to play at home! >>>>>> COSMOROIDS, ROLLERBALL, LADYB FLASCHIBER - The game, brilliant LINGO, BALLY, NIGHTWORKS & YOUPI **UGAM1** UGAM2 UGAM3

>>>>>> Some of the best ANIMATIONS SPACE animation - needs 1meg RAM **UANIM1** UGA and STAMP animations, good! RUNNING MAN, TURNING MAN, UGA UANIM2 UANIM3 UANIM5 HAPPY GUY, WINDOW, F15 MIRROR

SPECIAL disks - a special collection >>>>>> USPEC1 ZOUNDMONITOR, like ST but better USPEC4 GHOSTWRITER, make your own screens
USPEC11 GAME MUSIC CREATOR, brilliant!
USPEC13 QL EMULATOR, just what it says!

plus 2 support disks available, version 2

These are brief descriptions, disks may contain much mor



official UK distributor for the range of quality disks

NEWSFLASH

Produced by NUK and UGA This disk magazine is distributed around the world and is acknowledged as the BEST Packed with information, these great disks, along with the SUPPORT DISKS, are now available monthly from Softville. We carry the full range and Issues start at No6, phone for the very latest version.

£2:99 each or £5:50 a set.

>>>>>> Utilities you can't get elsewhere UUTIL1 SinusCreator, Bootcontrol. CLIWizard.

Iconlab, CRLoad, Mandlevroom, Bootune UUTIL3 Tetrapack, Showfont, Bootback, Disksalv, TrackerX, Iconizer, SceneryMaker etc. etc. UUTIL9 KickSaver, Terrainsculpt, StarEditor, Bootext,

Sonixpeek, Flowripper, Linkiller etc. etc.

We stock over 90 of these fabulous UGA >>>>>> disks, all easy to use, menu driven and exclusive to us!

> PLUS we have the complete FRED FISH collection, Currently over 360 disks, with more added monthly

PLUS the A.P.D.C collection PLUS the PANORAMA collection PLUS the AMICUS collection plus the SLIPPED DISK collection PLUS the T.BAG collection

And of course our own 'SOF' collection of Utilities and the very BEST demo disks, now numbering well over 550 in all!

STARTER PACK

Choose any 5 disks, get 5 blank disks + labels & a Library case for only £16.50 VIRUS KILLER DISK loads of killers inc. VIRUSX v4.0 ONLY £1:50 each (state Amiga)

Send an A5 size envelope (28p stamp) for a FREE copy of our 80 page catalogue. State CLEARLY the make of

your computer

Over 1,500 disks FULL of great programs. 1-5 disks - £3 each 6-9 disks - £2:75 each 10 and over - £2:50 each Buy 10 - get another FREE all prices inc. of Disk, Post & packing & VAT

SOFTVILLE

Unit 5, Stratfield Park, Elettra Ave, Waterlooville, Hants PO7 7XN.
Ring for advice or to order 24hrs on

0705 266509 Fax 0705 251884

Dept AF, 15 Croxteth Drive, Rainford, Merseyside, WA11 8JZ



Cheapest Prices!!

Blanks: Sony Branded £1 Unbranded 60p

Prices:

1-5 = £1.506-10 = £1.2511 + = £1.00All Prices Per Disk Subtract 50p per disk if you send your own blank disks

MSC JAMS. Mouse/ Joystick Switch £12.99!!

Newsflash only £4 for 2 disks!!

We're Number One For P.D.

Starter Pack 1

Life Membership Catalogue Disk FREE P.D. ONLY £1.00!

Starter Pack 2

As Pack 1 with New StarTrek, Newsflash Mag, Space Ace ONLY £5.00!

Starter Pack 3

As Pack 1 with NewTek Demo 3, The Run, Viz Slideshow ONLY £5.00!

Starter Pack 4

As Pack 1 with P.D. Spectacular, WordWright, TV Graphics ONLY £5.00!

DEMON SOFTWARE

The cheapest AMIGA demo library in existence POSTAGE AND PACKING ARE FREE

Demos are 75p each if blank disks are supplied by the customer or £1.45 if we do. For our free list disk which includes graphics music and blank disk to us.

DEMON SOFTWARE HARBLEDOWN WESTLAND GREEN LITTLE HADHAM demos send an SAE and a HERTS SG11 2AQ

THAT BIT BETTER THAN THE BEST OF THE REST

AMIGA PUBLIC DOMAIN



LOOK!! ☆ HUNDREDS OF TITLES ☆ STARTER PACKS ☆ ☆ FAST, RELIABLE SERVICE ☆

NOW ONLY

	21.00 each of 210	130/10	
Pack A	Delirious 1,2,3 & 4 (XXX)	(4 discs)	£6.50
Pack F	Titanics, Crusaders, Trash & TTB Music	(3 discs)	£5.00
Pack L	Every inch a lady Sabrina, Sam Fox (15)	(3 discs)	£5.00
Pack M	Tiffany, Madonna, Debbie Gibson, Kylie	(4 discs)	£6.50
Pack O	Mayfair, BFPO 2&3, Calendar Girls (XXX)	(4 discs)	£6.50
Pack P	Body Talk A&B*, Showering Girls* (XXX)	(3 discs)	£5.00
	AAAA SPECIAL OFFER AAAA		
Pack A +	Pack L + Pack O (XXX)	(11 discs)	£16.00
	* 1 MEG OR MORE XXX ADULTS ONLY	,	

CALLERS WLCOME MONDAY TO SATURDAY 09.30 - 17.00, WEDNESDAY 09.30 - 13.00

SEND A LARGE S.A.E. FOR LATEST CATALOGUE. PLEASE MAKE CHEQUES/POSTAL ORDERS PAYABLE TO:

MAGNETIC MEDIA
VICTORIA ARCADE, ALDERGATE
TAMWORTH, STAFFS B79 7DL
TEL: 0827 59566

PRICES INCLUDES VAT 1st CLASS POST IN UK (Airmail Postage: Europe/Scandinavia £3.50/10) Other countries £6.50/10)



PUBLIC DOMAI

SONY 3.5" unbranded 62p each

Disk Labels 200 for £5.00 **Soft Mouse Pads** €3.25

LC10 Printer Ribbons Black £3.25 Colour £5.75

Storage Boxes 10 cap £1.25 100 cap £7.95



Out Now! PD Update Issue 4, complete list, over 100 new disks reviewed, special utility feature, competition, letters and more

ONLY £1.10 PER DISK

PD DISKS
ONLY £1.10 PER DISK
0. HORROR DEMO Digitised anim. of exploding head plus arm chop
2. HORROR DEMO Digitised anim. of exploding head plus arm chop
3. RAF AMEGADEMO Excellent mega which set the standard (2 disks)
3. RAFERINA MEGADEMO Tenfer, highly recommended
5. FORGOTTEN REALINS PICTURE SHOW Fantasy Devil Hobbit type pics
6. RSI MEGADEMO Probably still the worlds best... GET IT (2 disks)
1. DEATHSTAR MEGADEMO inc fantastic cosmic explosioni (2 disks)
1. DEATHSTAR MEGADEMO inc fantastic cosmic explosioni (2 disks)
1. PREDITORS MEGADEMO inc 2 games! Great Aussie Demo (2 disks)
1. RIEDITORS MEGADEMO inc 2 games! Great Aussie Demo (2 disks)
1. RREDITORS MEGADEMO rac 2 games! Great Aussie Demo (2 disks)
1. REDITORS MEGADEMO chapter great selection of demos (2 disks)
1. REDITORS MEGADEMO or 4 another great selection of demos (2 disks)
1. REDITORS MEGADEMO Selection of the art. Had rave reviews!
1. RARCHY DEMOS! Includes Coma Demo for Acial freaks!
1. RARCHY DEMOS! Includes Coma Demo for Acial freaks!
1. RARCHY DEMOS! Includes Coma Demo for Acial freaks!
1. RARCHY DEMOS! Encludes Coma Demo for Acial freaks!
1. STAR TREK ANIMATIONS Very popular animations
1. SKAKTUS & MAHONEY Great mixture of music
1. TITIANICS MUSIC One of our best but note V1.2 or 1 MEG 8. No F/A
1. VANGELIS DEMO Great that wais, fantastic light showd (1 MEG)
1. DIGITAL CONCERT 2 Over 12 mins of good sampled house!
1. REEKID OUT Cheeky graphics and great music, recommended
1. ITV MUSIC 3 good mixes sincluding 'Get Up'
1. PACE MUSIC Chart turns get the Aming amix treatment
1. TED (Please state you are over 18)
2. PICTURE SHOW VOL 2. Glamour Piccys with Glen Miller Backing

NAME: PASE MUSIC CHart tunes get the Amiga mix treatment X RATED (Please state you are over 18 No. 18 No.

GAMES 3103. STAR TREK GAME 1 Great sound (2 disks, 1 MEG, 2 drives) 3103.4. STAR TREK GAME 2 Sound plus piccys (3 disks, 1 MEG, 2 drives) 3107. STAR TREK GAME 3 Tobias's all new latest Trek Game (2 disks) 3109. BLIZZARD Great horizontal shoot em up

STOP PRESS .. STOP PRESS .. STOP PRESS .. £1.35 per disk STOP PRESS ... STOP P

The above 4 disks "WILL KNOCK YA SOCKS OFF" so get them now!!

LATEST IN PLEASE NOTE £1.35 PER DISK
D199: BRUCE LEE DEMO ... By Pendle Europa, Digi picovo

ATEST IN PLEASE NOTE £1.35 PER DISK

1798 BRUCE LEE DEMO... By Pendle Europa, Digi piccys and good tune.

1793 COOL COUGAR... Digi piccy with cardoon overlays. Clever! (1 MEG)

1797 AMAZE DEMOS. 2... 6 demos including scroll editor!

1797 AMAZE DEMOS. 2... 6 demos including scroll editor!

1798 BIO OF CENTURY MEGA DEMO... Not mega but good! Good cardoon

1799 BRUNGLE MEGA DEMO... Good scrollies and vectors plus piccy.

1799 BIO OF CENTURY MEGA DEMO... as is, part mega demo. All cleverstuff

1799 BIO OF CENTURY MEGA DEMO... as is, part mega demo. All cleverstuff

1799 BIO OF CENTURY MEGA-DEMO... as is, part mega demo. All cleverstuff

1799 BIO ILMITS DEMO PACK 0381... Boothemu Construction Kit. -7 demos!

1799 BIO ILMITS DEMO PACK 0381... Boothemu Construction Kit. -7 demos!

1799 BIO ILMITS DEMO PACK 0381... Boothemu Construction Kit. -7 demos!

1799 BIO ILMITS DEMO PACK 0381... Boothemu Construction Kit. -7 demos!

1799 BIO ILMITS DEMO PACK 0381... as demos... All cleverstuff

1799 BIO ILMITS DEMO PACK 0381... and the beat of digitised pictures

1799 BIO ILMITS DEMONITAGE 1... Another collection of digitised pictures

1791 BIO ILMITS DEMONITAGE 2... of High res stuff from UTOPIA.

1791 ROGER DEAN SUIDESHOW... This is not new Dut it is good slides

1791 BIO ILMITS DEMONITAGE 3... of High res stuff from UTOPIA.

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1791 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1792 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't mention the ward)

1793 BIO ILMITS DEMONITAGE 3... Digi piccys of (don't me

DS16. WALKER DEMO 2 ... Walker attacked by the helicopter (1 MEG)
MUSIC
MUSIC
MUSIC DEMON MUSIC DISK. ... Good sounds and lots of tricks
MUSIC SHOP SHOW THE STATE OF THE STAT

LATEST RECOMMENDED ONLY £1.35 per disk

D001 - ALCATRAZ MEGA DEMO 4 . (3 disks) absolutely brilliant!!

D011 - NEWTEC DEMO REEL 3 . 1 MEG, 2 bisks. . a very good advert demo!!!

D315 LUNEEAL DEMO . Game demo. Fantastic graphics and FX

D318 - RAXION FANTASY PICS. . Great show with info too! (1 MEG, 2 disks)

D510 - THE RUN. Tobias Richter's police chase anim. (1 MEG!)

M070 - CRUSADERS BACTERIA. . Brilliant music and some excellent anims!

M088 HCC LUTIMATE JARRE DOCKLANDD SDEMO. . and it sill Get it!!!

X110: FRAXION HORROR. .. Brilliant graphic horror show. Don't miss it!

Prices are per disk. Please note some titles are 2 disks or more. All prices include VAT. (VAT receipt sent on request) Please add 50p to total order towards postage and packing

gues / PO should be made out to NBS and N.B.S. • 132 Gunville Road • Newport • Isle of Wight PO30 5LH Tel (0983) 529594 • Fax (0983) 821599

VISA erseas orders welcome! Please add £2.00 for postage Maximum order 10 disks. International (Girobank) Money Order, Eurocheques or cash (£stg, \$US) only.

A full catalogue will be sent with your order or send a 20p stamped, self addressed envelope. Min size 9" by 4"

Our PD prices may appear to be cheap to you! There is no catch, no hidden charges, no one off memberships. We sell the same programs as supplied by other PD companies, at a price we think is reasonable. The disks used are top quality, unbranded media,

Thousands of Amiga owners have used us and like our speed, quality and service We are waiting for you to join our happy family.

Having discovered what delights there are in the public domain, you must be dying to experiment with it for yourself. What better way to explore than by having Recoil PD's entire disk collection to revel in, or by winning their top ten best-selling disks?

All you have to do to win is sort out Recoil's top ten bestselling disks at a recent computer show into the correct order of popularity. Not an easy task, but whoever gets it right or gets closest to it will win Recoil's entire library, which is already over 200 disks and growing rapidly. 10 runners-up will also get all 10 disks featured in the top 10 list and they are all pretty special.

Here are the top ten disks, in no particular order:

Get to the Safehouse (THR)
Cebit Collection
Walker II animation
Mental Hangover (Scoopex)
Games Music Creator
Enterprise leaving dock animation (Agatron)
Star Trek the game (two disk version)
Kefrens Megademo
Star Trek animation (Agatron)
Recoil exclusive music disk (THR)

HOW TO ENTER

On the back of a postcard or stuck-down envelope, put the 10 disks in order of popularity from 1 through to 10. Then send it to: Recoil Comp, Amiga Format, 30 Monmouth Street, Bath BA1 2BW. The entries should reach us by September 17th and don't forget to include your name, address and phone number on the postcard.

RULES

Employees of Future Publishing and Recoil PD are not allowed to enter. The judges' decision is final. No correspondence will be entered into.



Get your hands on Recoil PD's entire disk collection





U

M E

R

S

Δ

E

n

M.D. Office Supplies would like to take this opportunity of apologising to all its competitors. Our MAD SUMMER SALE will be offering Discs, Storage Boxes etc. at UNBELIEVABLE, UNREPEATABLE, MAD, MAD PRICES. As ever the best cost less at M.D. Office WE GUARANTEE IT.

M	
3.5" DISCS & BOXES	
35 3.5" DS-DD 135 TPI with 100 Capacity Lockable Storage Box	£21.95
45 3.5" DS-DD 135 TPI with 100 Capacity Lockable Storage Box	£34.95
65 3.5" DS-DD 135 TPI with 100 Capacity Lockable Storage Box	£39.95 £44.95
100 3.5" DS-DD 135 TPI with 100 Capacity Lockable Storage Box	£54.95
150 3.5" DS-DD 135 TPI with 2, 100 Capacity Lockable Storage Boxes	£74.95

OUR 3.5" DISCS ARE VERY CAREFULLY SELECTED TO GIVE UNQUESTIONABLE reliability and incredible VALUE for money. Each diskette is supplied with a label and is Certified 100% error free.



OUR 5.25" DISCS ARE <u>VERY CAREFULLY SELECTED</u> TO <u>GIVE UNQUESTIONABLE</u> reliability and incredible <u>VALUE for money</u>. Each diskette is supplied with a label and is <u>Certified 100% error free</u> and is offered with our 100% money back guarantee and is supplied with envelopes, W.P. tabs.

નાવા પકારા જેક મારાકાર્યા મામ

10 DS HD 3.5" Discs in plastic library case	£14.99
30 DS HD 3.5" Discs with 50 Capacity Box	
50 DS HD 3.5" Discs with 100 Capacity Box	
100 DS HD 3.5" Discs with 100 Capacity Box	
(For larger quantities please ring)	

भारता महाराज्य इन्द्रहा महादेश

25 DS HD 1.6 Meg with LOCKABLE STORAGE BOX	£14.99
50 DS HD 1.6 MEG with LOCKABLE STORAGE BOX	£27.99
75 DS HD 1.6 MEG with LOCKABLE STORAGE BOX	£39.99
100 DS HD 1 6 MEG with LOCKABLE STORAGE BOX FA	7 99

(For larger quantities please ring)

For all you large users we have some unbeatable bulk rates on our superb DS-DD 3.5 discs.

400 DS DD 135tpi	£160.00
500 DS DD 135tpi	£195.00
600 DS DD 135tpi	
800 DS DD 135tpi	
1000 DS DD 135tpi	

As always lifetime guaranteed, unquestionable reliability, each disc is supplied with label.

HEW EXCITING PRODUCT

COLOURED 3.5" DSDD DISCS

25 DSDD 135TP	I Rainbow	Discs	£16.99
50 DSDD 135TP	Rainbow	Discs	£33.99
75 DSDD 135TP	I Rainbow	Discs	£49.99
100 DSDD 135TP	I Rainbow	Discs	£62.99
(packs are sup	plied in 5	different co	olours)

Stackable disc boxes 80 capacity and lockable. 1off - £9.95 3 off - £8.95 5 off - £7.95 Can be stacked horizontally or vertically as you please. Tilt 'n' Turn 14" Monitor Stand, a superb investment

> only £9.95 Data Switches 2 way manual switch

(State serial or parallel) only £12.95

Price & Cuality CUARANTEE

M.D. Office Supplies prides itself on offering the HIGHEST QUALITY products at the best possible prices. In the unlikely event that you should see a COMPARABLE product offered cheaper in this magazine DO NOT HESITATE give us a call because

we won't match that price.

ME MILL BEAT IT GUARANTEED



18 CRESCENT WAY, FARNBOROUGH, KENT BR6 9LS ESALES HOTLINES: 0689-61400





M

M Δ

D

S

U

M

AD SUMMER SALE







M Δ D

Ε

ON YOUR DISK

YOLANDA

Steve Bak's back with a stunning platform game steeped in ancient mythology and compelling arcade action. Guide Yolanda, daughter of Hercules, through 12 tasks and lift the curse that plagues her family.

BRIMBLE'S BEATS

Allister Brimble demonstrates why he's best when it comes to creating sensational four-channel sampled sonatas. Roll over Bach!

ZOOM!

A cracking utility that packs an almighty punch in just 1.5K. Screen blanker, mouse accelerator and CLI summoner all in one small package.

MOUSECOORDS

Keep track of your mouse pointer's whereabouts with Jonathan Potter's pucker pecker checker.

WORKBENCH HACKS

It's that time of the month again when you get to dabble with the dubious delights of demented programmers discoveries. NETWORK your Amiga or you'll be MSIZER and BANG to rights...

FSDIR

Cut down on your Amiga floppy drive's grinding and increase the speed at which directories are delivered with Chris Hames' devious utility.

RAPS

An intriguing variant of the classic game Draughts, played on a four-by-four board. Immensely playable as well as frustratingly addictive.

SYS

Humorous arcade game in which you must clean your sysop's virus-infected hard drive. Silly sampled sounds, 50 scintillating action-packed sectors and dozens of exquisite sprites.

£ 8 0 0

UP FOR GRABS!

for the Amiga Format Coverdisk? Get vour programming tools out and prove what you can do, and earn yourself some cash in the process. We're after Workbench hacks, demos, utilities, games, game cheats... You could earn up to £800! Turn to Page 92 for details.

BACK UP YOUR COVERDISK

IMMEDIATELY!!!

DON'T KNOW HOW? SEE P 92 FAST! ENSURE YOU WRITE-PROTECT YOUR DISK REFORE USE!

CISSINGA EXTRA

The disk is packed with the usual diverse collection of useful utilites and fun and games. All you need to know is how to use it. RICHARD MONTEIRO explains.

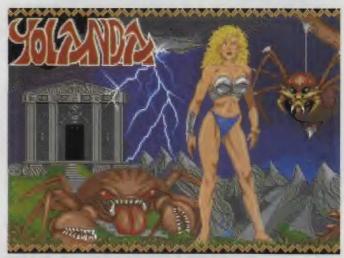
YOLANDA PROGRAM: MILLENIUM FILES: YOLANDA, YOLANDA.DOC

Long, long ago, when ZX Spectrums and Commodore 64s stalked tall, there was a man with a mission. The man was Steve Bak. His mission was to write a game based on the heroic deeds of Hercules. And so the game featuring the Greek demi-God was grafted. But, lo, time passed and soon other machines came to be. And that man Bak came back to recreate another Greek legend. *Yolanda* was born.

Yolanda is based on a game for the Commodore 64 called Hercules, written back in 1984 by one of the most prolific and proficient of programmers, Steve Bak. Although Steve isn't credited with coding the Amiga version, he heads the team responsible for such deeds.

Hercules, being around 3000 years old and suffering terribly from piles, decides his daughter Yolanda should carry on his great work. Yolanda, a strapping 2970-year-old Greek blond bombshell, is subsequently cursed by the Goddess Hera who is extremely envious of Hercules' daughter's stunning looks.

The curse goes thus: anyone Yolanda falls in love with will die horribly within a week of their meeting. If, however, Yolanda can re-enact the 12 labours of Hercules the curse will be lifted.



This skimpily clad blond bombshell is Yolanda, Hercules' daughter. Don't let her looks deceive: she'd much rather mash you than mush with you.

The full game features over 50 levels of tough platform action. In this demo version you are placed on the first screen of one of the first 11 missions. If a screen is completed you can go no further in that mission. If you die, which is much more likely, a new screen is selected. This continues until you have no lives.

You must keep moving or the floor beneath you will burst into flames and disintegrate in seconds taking you with it. Long Tarzanstyle vines which initially appear harmless may suddenly explode in a fireball as you touch them. Some screens appear disquieteningly harmless, but platforms will suddenly appear as you leap into nothingness. The correct route to



Yo! Landa give us a handa with saving the World.



Steve Bak's 1984 C64 Hercules polished and reprogrammed to bring it in line with the '90s.



complete the screen must always be taken – finding it will be taxing.

Getting Started

Reset the computer and place Coverdisk 14 in drive df0: (the internal drive). Click the left mouse button when the introductory message appears. A menu displaying the contents of the disk will appear. Press F1 to load *Yolanda*.

A help file will appear first. Read this for hints on the game. Press Esc to exit the help file and run the game.

Ensure there's a joystick plugged into Port 2 and press the fire button to start the action. Controls are simple enough: left and right for left and right movement respectively, Fire to jump.

BRIMBLE

PROGRAM:
ALLISTER BRIMBLE
FILES: BACH80SMIX,
BACH80SMIX.DOC

An excellent example of what can be done when one of the master of Amiga music puts his mind to it. From the main menu press F2. Alternatively double-click on the cumbersomely-christened BACH80SMIX from the Workbench and enjoy one of the best sampled sonatas around. Pressing the left mouse button halts the music.



MOUSE COORDS PROGRAM: JONATHAN POTTER FILES: MOUSECOORDS, MOUSECOORDS.DOC

Here's a short program to show you the coordinates of the mouse pointer. It's handy for such things as aligning icons or checking the position of graphics from within packages that don't offer such a facility or even cluttering up the screen with yet another gadget.

Getting Started

Pressing F4 from the main menu will cause a window drag-bar to appear in the top-left corner of the screen. Alternatively double-click on the file MOUSECOORDS in the MOUSECOORDS drawer from the Workbench. You'll notice the X and Y coordinates of the pointer being updated as you move the mouse.

The JUMP gadget allows you to move the MouseCoords window to the next screen. If MouseCoords is on a screen other than Workbench, you should either jump MouseCoords elsewhere or close it before closing the screen.

ZOOM! PROGRAM: PUBLIC DOMAIN FILES: ZOOM!, ZOOM!.DOC

A phenomenal feature-filled utility that sits in less than 2K. Zoom! replaces PopCLI (a CLI window summoner), QuickMouse (a mouse accelerator), and Pyro (a screen blanker). Extremely useful. To access the various features:

 Press the Left-Amiga and Esc key simultaneously to produce a new CLI window. Any old CLI command can be entered directly.

• Your mouse will be made to move more rapidly automatically. If you shift your mouse faster than three ticks per I/O message, which is actually pretty rapid, Zoom! will accelerate the pointer. Thus you can have a fast pointer when required and fine resolution the rest of the time.

• The screen is automatically blanked after 300 seconds. You can change the blanking time by pressing Left-Amiga and F1 for three seconds, F2 for 300 seconds, and F3 for a time of 3000 seconds. The screen is restored if any keyboard or mouse activity is detected. The pointer is blanked after 10 seconds of no movement. This gets the mouse pointer out of the way; any mouse movement brings the pointer back.

Getting Started

D

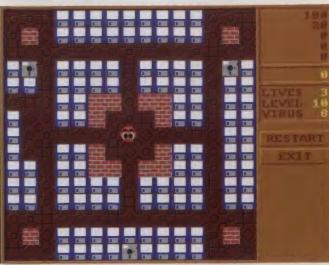
ı.

Hitting F3 from the main menu will install *Zoom!*. Leave the mouse alone for about 10 seconds and you'll notice the mouse pointer will disappear – *Zoom!* has installed properly. Moving the mouse will make the pointer reappear.

Zoom! may be terminated by pressing Left-Amiga, Ctrl, and Esc simultaneously.

If you wish Zoom! to be installed automatically every time you boot, do the following. Boot with your Workbench disk. Enter the CLI and type in this short command sequence (next page):

SYS



You've got to destroy the numerous viruses infecting your sysop's hard disk by booting 3.5-inch floppies at them.

PROGRAM: ANDERS BJERIN FILES: SYS, SYS.DOC, SYS_HIGHSCORE.DAT, SYS_SOUND1.SND... SYS_SOUND7.SND

You've been assigned the demanding task of cleaning your sysop's hard disk of viruses. These nasty creatures have infected all data sectors, and you have to wipe them off sector by sector.

To eliminate a virus you simply kick a disk at it. But beware, viruses kill on contact. It's important that you are fast and kill viruses before they start destroying your 3.5-inch floppies.

There are 50 different levels (sectors). Each level becomes increasingly faster. Viruses become smarter and start to hunt you on higher levels. Numerous types of virus will attack you; each employs a different tactic.

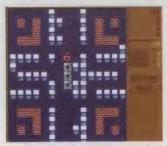
Other items appear from time to time which aid you in your quest. A red cross provides you with an extra life; a telephone modems you to the next sector; a copy of Lattice C boosts your speed and a question mark gives a mystery bonus. Happy virus hunting!

Getting Started

Press F8 to get Sys started. A list of options will be shown to the right of the screen. Click on Play to begin. You will be asked to enter your name (three letters). Press Return or point and click at OK to proceed. The game will start. Remember to move the mouse to the left side of the screen. If you don't, the program will remain in pause mode.

From the Set-Up option which appears in the same menu as Play it's possible to alter the default control keys. The default keys are almost all assigned to the numeric key pad:

lp - 8	You can also use a	F1 -
light - 6	Joystick which	
own – 2	should be attached	F2 - Stop
eft - 4	to port 2. Other	
itop – 5	controls available	
lick - space	to you include:	F10 -



You'll gain a bonus by grouping the three silver 5-inch floppies that grace certain sectors.



Makes you move

p after every step F6 - Music on

- Start at level 10

continuously

F7 - Music off

Items like a red cross, 'phone and copy of *Lattice C* can be collected to aid your battle.

When you're talking AMIGA talk to Microsnips

In fact, whatever your needs, we have over 3,600 different computers and accessories in stock -all backed by the knowledgeable, highly professional service that has made us one of the most respected

computer dealers in Britain.

So whether you're looking for hardware, software or just some expert free advice, consult the Amiga specialists.

Talk to Microsnips

AMIGA FLIGHT OF FANTASY PACK

Including 'Extras', Workbench 1.3, Manuals, Modulator, Rainbow Islands, F-29 Retaliator, Escape From The Planet of the Robot Monsters, Deluxe Paint 2, Mouse Mat, 5 free disks, Mouse Holder and Disc Box

NOW ONLY £399.00

DISC	DO	III IEA
DISC	1314	IVES

Cumana 3½" 1mg Amiga	£89.95
MGT Lifetime 1mg Drive (suits all computers with suitable lead)	£139.00
Q-Tec 3½" 1mg Amiga Drive	£79.95
Cumana 51/4" Amiga Drive	£139.95
A590 20mg Amiga Hard Disk	2399.00
MONITORS	
Philips CM8833 Stereo/Medium Res	£249.00
Commodore 1084 Colour	£229.00
Amiga-Scart Lead	£10.95
DISK MEDIA	
20 31/2" DSDD 100% Certified Disks	£18.95
30 51/4" DSDD 100% Certified Disks	£9.95
10 31/2" TDK DSDD Disks	£14.50
Lockable Disk Box Holds 50 – 51/4"	26.99
Lockable Disk Box Holds 40 – 3½"	£6.99
Lockable Disk Box Holds 100 – 3½" Mouse Holders	£7.95
Vision 10 Storage Box 31/2"	£2.99 £1.95
Vision 10 Storage Box 51/4"	£1.95
Mouse Mat 8mm Quality	£3.99
PRINTERS & ACCESSORIES	20.00
Apollo RF/Anti Surge Trailing 4-Way Socket	£24.95
Amiga/Centronics Cable (2m)	£9.95
Citizen 120D	£149.95
Panasonic KX-P1124 Printer	£299.00
Panasonic KX-P1081 Printer	£179.00
Star LC10 Mono	£179.00
Star LC10 Colour	£229.00
2000 Sheets Fanfold/Microperf	£15.95
Star LC10 Colour Ribbons	£7.95
Panasonic/Star/Epson Ribbons	£3.99
80 Column Printer Stand	£9.95

RING 051-630 3013 TO ORDER

or for FREE CATALOGUE Answerphone 6.00 p.m. - 9.00 a.m.







OVERSEAS CUSTOMERS NOTE Postgiro International accepted. NOT Postbank Postcheque. Books not taxable -Europe add £5. Non Europe add £10. We reserve the right to charge carriage at cost.

UK POSTAGE AND PACKING. Items under £50 add £2. Items under £100 add £5. Items over £100 add £10 for Group 4 Courier ensuring delivery the day after the despatch. Overseas customers (Europe): Full price shown will normally cover carriage and free tax. Non Europe add 5% to total.



Making technology work for you!

37 SEAVIEW ROAD, WALLASEY, MERSEYSIDE L45 4QN 051-691 2008

FAX: 051-639 2714

Personal Callers Welcomed

£2.50 per disk for non-members £5.00 membership per year £1.50 per disk for members

FREE!! Monthly newsletter for members! Look!! Special point system on all disks. E.g. 10 K game = .1 point 100 K game = 1 point

Collect up to five points for your disk.

For more information send SAE for FREE printed catalogue to:

36 Partridge Way, Chaddarton, Oldham, Lancashire, OL9 0N1 or Tel: 061-652-1366 (10am till' 8pm)

AMIGANUTS UNITED



OFFICIAL U.K. DISTRIBUTORS FOR T.BAG. EACH ISSUE IS PACKED TO THE RIM WITH GAMES, MUSIC, UTILS, PICS AND ADVICE. THE LATEST AVAILABLE AT £1.80 EACH.



THE LATEST AVAILABLE AT \$1.80 EACH.

THIS MONTHS SELECTION AT £1.65 EACH INCLUDING POST & PACKING
(*) INDICATES NUMBER OF DISKS IN SET. (Example: -(2) - requires £3.30)
-(1) - The SHOWERING GIRLS Animation xxx (1 MEG)
-(1) - Packed with iff pictures for use with DPaint etc.
-(1) - COLOSUS Adventure (game) PLUS The adventure writer (utility)
-(1) - GRAVITY WARS and ASTEROIDS (games)
-(1) - GAMES COLLECTION (Packed with board games, including SOLITAIRE)
5 - (1) - SEVEN DEMOS, Please Note! The DICK demo is XXXXX rated!
4 - (1) - Education of a Cool Coyote (Funny 1 MEG animation, with sound)
1 - (2) - 2 MEG Version of the excellent WALKER DEMO
1 - (2) - 2 MEG Version of the excellent WALKER DEMO
1 - (1) - Phoenix MIAMI MAN (game)
4 - (1) - COMMS progs containing: JR.COMM/ACCESS 1.4/COMPUNET.
6 - (2) - NORTHSTAR/FARLLGHT MEGADEMO III (Well compiled)
8 - (1) - ARP v1.3 You should have this utility
2 - (2) - THE HEADKICK ANIMATION (REQUIRES 2 MEG)
6 - (2) - TOILET PAN BOMB RUN ANIMATION (REQUIRES 2 MEG)
5 - (2) - NEWTECH demo reel 3 (1 MEG)
6 - (2) - The Fantastic STAR TREK Game By T. RICHTER. (English Instructions)
7 - (1) - THE GOLDEN FLEECE (1 MEG ADVENTURE GAME)
0 - (1) - Python Music TI BET THEY WONT PLAY THIS ON THE RADIO" (1 MEG)
6 - (2) - TOINTH CONTROL THE CONTROL THE

70 94 95 98 215 334 341 371

374 376

Amiganuts/Amiga Format/New Computer Express: All good things come in threes

Amiganuts/Amiga Format/New Computer Express: All good things come in threes
THIS MONTHS SELECTION AT £2.00 EACH INCLUDING POST & PACKING
526: PARANOID Excellent BREAKOUT. Design/save your own versions, good sound
539: JAZZBENCH A marvellous replacement for your boring WORKBENCH disk.
576: EDUCATION progs for the children. (See catalogue for others like this)
581: SID updated version 1.6. Especially for those who dislike the CLI
592: Scoopex MENTAL HANGOVER (Excellent Filled Bobs etc)
599: PONTOON. A well written version of this card game by Chris Labrum.
600: THE FRAXION HORROR SHOW (Shocking xxx animations)
602: THE PORSCH ANIMATION by Tobias Richter (1 MEG)
607: AMIBASE V3.67 Good update to this nice database prog by Keith Grant
609: THE RUN by T. Richter HIS FAVOURITE and you can see why! (1 MEG)
610: RISING FORCE XXX-RATED ADULTS ONLY SLIDESHOW with 25 pictures.
612: EIGHT GAMES including: MUTANTS. MONTANA, TOWERS and H-BALL
613: ROBOTECH by Lee Cooper. A nice shoot-em-up game (Can you save the earth?)
618: REFLECTIONS 2 Original music composed by 4-MAT (Runs for 3/4 hour!)
619: BACTERIA by THE CRUSADERS Great music disk with fantastic play features
621: FONTS! PACKED with some excellent fonts (A GOOD SELECTION)
626: MEGADEMO II Another great disk from the well known CRYPTOBURNERS
627: DEMO COLLECTION An EXCELLENT selection of Anims and Demos etc.
FISH DISK 347: DRIP! A Commercial Quality Game, (great fun), Requires Workbench
LATEST CATALOGUE DISK IS £1.00 INC P&P. (ALSO CONTAINS MUSIC AND A GAME)
See the catalogue special offers page for some great money saving packages
Sorry! To keep our prices as low as possible, we cannot accept credit cards.
PLEASE NOTE THAT AMIGANUTS WILL BE CLOSED FROM 20th to 27th AUGUST.

Make cheques/Postal Orders payable to: AMIGANUTS UNITED 169, DALE VALLEY RD, HOLLYBROOK, SOUTHAMPTON SO1 6QX. PHONE 0703 785680 PLEASE NOTE: Some demos contain language that may be considered offensive

AMIGA PUBLIC DOMAIN SOFTWARE

Introductory pack only £5.00. Contains catalogue disk, virus disk (packed with virus killers), Utils disk (packed with utilities) and an intro disk (selection of demos).

* All our disks are £2 each. 10 or more £1.50 each *

* A wide range of disks rapidly growing

* Immediate despatch on all orders

* Full range of discount commercial software *

Special hardware discounts *

* Amiga specialists *

FREE PD CATALOGUE or send £1.50 for catalogue disk



WCA Business Systems Dept AF, Unit 2, 250 Carmarthen Road, Swansea, SA1 1HG Tel: (0792) 473550









ASHGOM



0530 411485



YOU NEED 512K NOW HOW MUCH WILL YOU NEED TOMORROW?



THE NEW ASHCOM RAM EXPANSION IS EXPANDABLE TO 1.8Mb GIVING YOU 2.3MB OF SYSTEM RAM

FEATURES:

- ★ Real Time clock/calendar with high capacity Nicad battery backup
- ★ Memory disable switch
- ★ Low power consumption
- ★ Buffered Data Bus (Essential for high capacity Ram boards)
- ★ Plugs in as A501 NO SOLDERING!!
- ★ 12 Months warranty

ONLY £74.95 for 512K version. Expander Board £19.95. Expanded to 1Mb £116.95 Expanded to 1.5Mb £147.95 Fully expanded to 1.8Mb only £179.95

£35 per 512K All prices include VAT and delivery.

Trade enquiries welcome. British made.

Please make cheques payable to Ashcom

ASHCOM 512K RAM EXPANSION
WITH REAL TIME CLOCK/CALENDAR
ONLY £40.00
AND DISABLE SWITCH WITHOUT CLOCK
£36.00

8372A 1.3

FATTER AGNUS KICKSTART ROM
£59.00 £28.00

Only from ASHCOM, 10 The Green, Ashby-De-La-Zouch, Leicestershire, LE6 5JU Telephone: (0530) 411485 Fax: (0530) 414433

CD DF0:C COPY COPY RAM: COPY CD RAM: (remove Workbench disk and insert Coverdisk) CD DF0:ZOOM! COPY ZOOM! RAM: (remove Coverdisk and insert Workbench or boot disk) CD DEO:C COPY RAM: ZOOM! DFO:C

Now edit the STARTUP-SEOUENCE on your boot disk. Add the line ZOOM! somewhere before the instruction LOADWB.

FSDIR **PROGRAM: CHRIS HAMES** FILES: FSDIR. FSDIR.DOC, CLI

If you get sick waiting for your floppies to produce a directory whether it be the AmigaDOS DIR command or the open file requestor in your favourite program - here is something that is guaranteed to speed things up and make you feel well again.

FSDir, short for Fast Smooth Directories, patches AmigaDOS so that the speed at which directories are delivered is greatly increased. In addition, the patch cuts down the grinding of the drive head as it moves from track to track.

Getting Started

FSDir is automatically installed when you boot with the Coverdisk. Pressing F6 from the main menu will simply show you the help file.

You'll benefit most from FSDir by forcing it to install itself whenever you boot with your startup disk. Details of doing that follow:

- · Run a text processor of your choice. When requested to load a file, insert your boot disk and load in the STARTUP-SEQUENCE file. You'll find it in the S drawer.
- · Somewhere before the LOADWB command enter the following: DF0:C/FSDIR.
- · For the above to work you must copy FSDIR into your C directory. One way of doing this is to start up with your Workbench disk, enter the CLI and type the following:

CD C:

COPY COPY RAM: COPY CD RAM:

(remove Workbench disk and insert Coverdisk)

CD DF0:FSDIR

COPY FSDIR RAM:

(remove Coverdisk and insert boot disk)

CD DFO:

COPY RAM: FSDIR DFO:C

· Exit the CLI, insert your boot disk in the drive and reset the Amiga to finish the process.

RAPS PROGRAM: ALAN SMITH **FILES: RAPS, RAPS.DOC**

Alan Smith has devised a cunning alternative to the classic board game Draughts. Raps is carried out on a four-by-four board, and is played by one or two players. Each player has four pieces.

The objective is to get one of your pieces to the other end of the board, or to get rid of all your opponent's pieces. There are three types of move:

- · A move to an empty adjacent square in any direction.
- · A jump over one of your own pieces to a blank square. Again, any direction is permissible.

· A take. The same as a jump, but over an opponent's piece. An opponent's piece is removed once it has been jumped over. If a take is possible it must be performed.

Getting Started

From the Coverdisk's main menu press F7. Alternatively click on the file RAPS (inside the RAPS drawer) from the Workbench. A window will appear showing a four-by-four board just waiting for something interesting to happen.

By pressing and holding the right mouse button you can access numerous menu options.

MODE lets you determine the play mode - human v computer, computer versus computer or



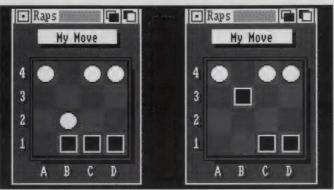
human versus human. Choose computer versus computer to get an idea of how to play. Choose human versus human to play a game or two against a friend.

LEVEL enables you to pick game difficulty when playing against the computer. Six is hard, one is easy.

Click on the piece you want to move then click on the square you want to move to. You will be told if you try an illegal move. If you are in a position to take but don't, you will be given a choice of moves one of which you must make.



Raps is played by one or two human players on a four by four board. Pieces are represented by squares or circles. The initial board layout looks like this.



Before and after a take. A take is similar to a jump, but occurs over an opponent's piece. Like draughts, an opponent's piece is removed once it has been jumped over.

WORKBENCH HACKS

Dare you enter the decidedly dodgy domain where dog-eared desperados display their dubious discoveries? Please note: Workbench Hacks can only be run from the Workbench.

Press F10 from the main menu and then double-click on the drawer WORKBENCH HACKS to get to them.

BANG! PROGRAM: M HORN **FILES: BANG!, BANG!.DOC**

Simply double click on the BANG! icon and try to use the left mouse button. Err. that's it. To stop the cacophony, click on the close gadget of the BANG! window and it'll go away.

MSIZER PROGRAM: **KHALED MARDAM-BEY** FILES: MSIZER. MSIZER.DOC

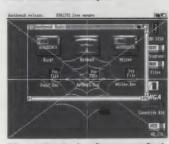
Meet YAUP: Yet Another Useless Program. Actually that's a lie. MSIZER could well be the first Workbench Hack to appear on the Amiga Format



Explosive fun with M Horn's own hilarious Workbench hack.



Khaled's hack lets you resize Amiga windows from any corner Sun workstation-style.



The net's closing in on you fast. There's nothing to do about it but run another program...

Coverdisk. Anyone who has access to a Sun workstation may well marvel at the manner in which it's possible to resize windows from any corner of the window. Well, with MSIZER you can resize Amiga windows from any corner. So there you are, a simple useful hack. Press Ctrl and the left mouse button while the pointer is resting over any corner of a window. While holding down the buttons move the mouse in any direction. Let go the buttons when you're done. Tadaaa! Resized window.

NETWORK PROGRAM: FRIDTJOF SIEBERT **FILES: NETWORK,** NETWORK.DOC. **NETWORK.HANDLER**

Hmmm... definitely not one of the most useful hacks to have appeared. NetWork simply creates a spider's web over your Workbench screen. Somebody somewhere might find it invaluable though. Please write in with suggestions to Amiga Format, 30 Monmouth Street...



USING YOUR FORMAT DISK

IMPORTANT! Before using your Amiga Format disk, you should make a back-up of the master disk as soon as possible.

BACKING UP YOUR DISK

For many reasons, it is important to make a backup of the Coverdisk as soon as possible. Copying the disk may sound like a complicated task suitable for techno-buffs only, but it is surprisingly simple provided you read the following instructions carefully:

- First, turn on your machine and load Workbench. Once the Workbench screen appears and the disk-drive light goes out, remove your Workbench disk and insert our Coverdisk.
- 2. Next, click once on the Coverdisk icon and then press the right mouse-button and the Workbench menus will appear. Now, while keeping the right mouse-button depressed, move the mouse pointer over to the 'Workbench' heading and a menu will drop down. Move the mouse pointer over the 'duplicate' menu option and then press the left mouse-button.
- 3. After a few seconds' disk access, the Workbench DiskCopy tool will be loaded and run. Now just follow the onscreen prompts and your *Amiga Format* Coverdisk will be copied to a backup disk. When the machine asks for the destination, insert your blank disk into the drive. Further instructions are in the user's guide that comes with your Amiga.

USING THE PROGRAMS

All programs on the *Amiga Format* disk are specially set up to make them as easy to use as possible. If you can use the Amiga's Workbench then you can use our Coverdisk! If you do have problems with a program, full instructions on loading and using the programs are included in Disk Extra and these should get you up and running. If you still have problems, you should read the documentation file (.DOC) that is included

with every program. To run any of the programs on this month's Coverdisk, follow a simple procedure: unless specified differently within Disk Extra, just double-click on the program's icon on the Workbench and it will load and run. Full details on how to use the programs once they have loaded are inc-luded as a documentation (text) file with the program.

To display a documentation file, just double-click on the appropriate .DOC file and a window will open containing the file's contents. Pressing the space bar will advance the text a page at a time.

COPYRIGHT NOTICE

Unless specifically stated, the programs on the Coverdisk are not in the public domain and the copyright remains with the author. Selling or distributing these programs without the author's permission is against the laws of copyright.

DISK EXTRA HOTLINE

0225 765086

Between 4pm and 6pm on weekdays only

Flummoxed by files? Dumbfounded by disks? Paranoid about programs? If you have a problem with the disk – and you're sure the disk is in full working order – phone 0225 765086 with your query. State the model of your machine and anything you've got attached to (or plugged inside) the computer. For problems with disks before Issue 5 phone Amiga Format on 0225 442244.

EARN UP TO £800

Name		Brief description	
Address			
Telephone (Daytime)		Checklist (please tick): Stamped, addressed envelope for return README.DOC explanation file on disk Printout of README.DOC file (if possible)	
Approximate total size of files in kilobytes		IMPORTANT Please sign this declaration	
☐ Game ☐ Business utility ☐ Music program	☐ Technical tool ☐ Art program ☐ Educational	against any possible legal action should copyright problems arise. Signed	
Novelty	Other	Date	

IS YOUR DISK FAULTY?

We have done our best to check that the programs on the *Amiga Format* Coverdisk are simple to use, errorfree and have no known viruses. However, we cannot normally answer telephone queries on using the software, and we do not accept liability for any consequences of using the programs on the disk.

If your Amiga Format disk is faulty – and out of the tens of thousands duplicated, some are unfortunately bound to be – you should send it back for a free replacement within a month of the cover date to:

Amiga Format
September Disk
PC Wise Ltd.
Unit 3,
Merthyr Industrial Park,
Pentrebach,
Merthyr Tydfil,
Mid Glamorgan.
CF48 4DR

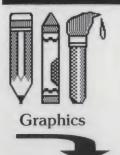
If your Amiga refuses to accept the disk, try using the DISK-DOCTOR utility on your Workbench disk to rescue it before sending it off for a replacement. Full details of DiskDoctor can be found in the user's manual that came with your machine.

WE WANT YOUR PROGRAM

If you've got any programs for the Amiga which you think other readers would find useful, interesting or amusing, we'd very much like to know about them.

1. Make sure your program is fool-proof to use. 2. Create a file called README.DOC on the disk which explains exactly how to use your program. 3. Fill in this form, sign it, and send it without delay to: Coverdisk Software, *Amiga Format*, 30 Monmouth Street, BATH BA1 2AP. You could win a share of up to £800 prize money for the best programs each month.

Pdom PD Amiga Public Domain & Shareware Software



AMP3 - Graphics Pack 1 AMP8 - Game Pack 1 -Clip It! clip any part of the screen and save to disk, Othello, Klondike, Filter Pics manipulate pictures with enhancers, edge definition, colour and size shifters, Amiga MCAD excellent CAD package. IFF to pieces jigsaw program, ROT 3D drawing prog, VDraw V1.19 brilliant painting program, Ray Tracer Generator.

AMP21 - Graphics Pack 2 - DBW Render a very good Ray Tracing utility, Mandelbrot Explorer. Excellent full features mandelbrot designer. ST2IFF convert Atari ST pictures to Amiga IFF format. HAM Editor drawing program. HAM to IFF convertor. FFISH 295 - Mandel

Mountains V1.1. Mandel

Brot Generator. FFISH 334 - FBM is an image manipulator and convertor: Sun, GIF, IFF, PCX, PBM bitmaps, Can input raw images, and output PostScript & Diablo. Also does rectangular extraction, density and quantization, halftone



Games

Clue as in Cluedo, Canfield, Cribbge, ackgammon, Yahzee, TVision, Missle ommand, Cosmo 2, 3D Breakout, Empire, Gravity Wars, Hanoi, Hockey, ikoff, Jackland, Othello Master, PDOM 62 - The Public Pacman, all rilliant PD games. 3 disks only £7.50! AMP22 - Games Pack 2 - Amoeba space invaders, CosmoRoids, Stone Age a Boulder Dash type, Back Gammon, Chain Reaction, Master Mind, Reversi, Black Jack, Crazy Block Champion the Eights, Klondike, Tig Saw, Keno, YachtC, Daleks, Ratmaze, Monopoly and Escape From Jovi the

excellent game. Replacement PDOM 90 – Tennis! The includes text best shareware game on the Amiga. Excellent! Requires 1Mb of RAM. **PDOM 79, PDOM 80**

3 disk game. Amazing graphics! Fully working Brilliant! Requires 1MB RAM.

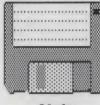
PDOM 215, PDOM 216 Salvage, Virus check,

- Star Trek 2 disk game. contrast changes, rotation, Totally different, and even better excellent game!



Full details of all the disks are available on our disk based catalogue only 70p!





Utility

FFISH 327 - Msh handles MSDOS/ST formatted disks. You can use files on such disks in almost exactly the same way as you use files on native AmigaDOS disks. This is a fully functional, read/write version. Dominator Anti Virus Disk: Virus X V4.0, VCheck V1.2 (for

memory), VCheck V1.9 (for disk drives), Zero Virus V1.3 the fully integrated virus detector and killer. Also Boot utility and information on boot blocks.

PDOM 93 - ARP v1.3. The AmigaDOS Replacement Project manual files. APDC 15 - Icon

utilities: full of icon files and creators. Some & PDOM 81 - Star Trek animated! Brilliant disk for Jewish, borders, icon manipulation. APDC 18 - Floppy Disk Utils: Quick Copy V1.0,

Disk Mapper, Disk System Utils: Blitz V1.0 text editor, TimeSet, ACalc, Amiga Monitor V1.1, MeM Grab fast memory grabber and DirectoryMaster V1.1. FFISH 342 - IE V1.0 is

an icon editor up to 640x200 pixels in size also dual render. Fully featured.

FFISH 244 - Boot Block Champion V3.1 load, save and analyze boot blocks. BootIntro V1.2 you specify The headline text of upto 44 characters and the scrolling text of upto 300.

Application

AMP1 - Home Business Pack: UEdit word processor, Visicalc spreadsheet, RIM and Hyperbase databases and spell checkers etc. 3 disks only £7.50! APDC 17 - 2 Micro Emac editors: Micro GnuEmacs MicroEmacs. FFISH 144 Analyticalc V22.3D is a

large & powerful spreadsheet program requires 1MB RAM and one floppy.

AMICUS 17 – Commu-

nications: COMM v1.33, Aterm V7.2, VT-100 V2.6, VTek V2.3.1, Amiga Host V0.9 for CompuServe.

PDOM Clip It! Vol1. Nearly 3Mb of clip art in standard IFF format. Subjects covered are varied but are mainly: sports, flags, animals, cartoons, humorous, Christmas, Halloween, Valentines, horses, eyes, alphabets, hands, 1930's trade marks, zodiac, cars and many more. All compatible with DPaint II. All in black and white, 5 disks full.

PDOM RAM UPGRADE

Upgrade to 1Mb RAM, amazing price: without clock

£48.50! With clock

£55.00! Just plug in!

Miscellaneous



PDOM 211 - NorthC the latest all features excellent C compiler. Suitable for beginners and the knowledgable alike. Fully comprehensive. FFISH 171 - Sobozon C a port of the Atari ST version of this full K&R C compiler, assembler and linker. Not for the beginner

FFISH 193 - Zc V1.01 modified version of the Sobozon C compiler from disk FFISH 171. It now generates code compatible with A68k assembler and has a front end to allow

easier useag FFISH 337 - CManual V1.0 is a complete C manual for the Amiga which describes how to open and work with screens, windows, graphics, gadgets, requesters, alerts, menus, IDCMP, sprites, etc. Includes huge manual file and over 70 fully executable examples with source code. When unpacked fills up 3 disks. FFISH 314 - A68k v2.61 the 68000 macro assembler. Excellent. FFISH 339 - PCQ V1.1cis a freely redistributable, self compiling, Pascal compiler. The only major feature of Pascal that is not implemented is sets. FFISH 349 - MED V2.0 is a music editor much like SoundTracker with MIDI sequencing.

AMP11 - 5 disks full of Sonix files with the PD Sonix player. £12.50! AMP23 - 5 disks full of

Soundtracker files includes Sound Tracker versions 1,2,3 and 4. £,12.50!



Demos



PDOM 212 - Red Sector CEBIT '90 demo. Another excellent demo from RSI!

PDOM 213 - Rebels Coma demo an absolutely brilliant non stop demo totally different, and very original!

PDOM 214 - Fractal Flight. Created by HyperCube Engineerings' fractal landscape generator. Requires 1MB RAM

BRILLIANT! PDOM 148 - Escape from Singes Castle another amazing animation demo of the interactive game. Excellent follow up to Space Ace! PDOM 1 - The Walker Demo I is a mega animation demo that requires 1Mb RAM. PDOM 2 - The Walker II the mega mega animation demo that requires 1Mb RAM.

digitised HAM pictures. Excellent! The quality is astounding. PDOM 27 - Alcatraz Mega Demo II. Mega!!

FFISH 196 - Stunning

PDOM 65 & PDOM 66 Red Sector Mega Demo. THE best demo on the Amiga! Amazing graphics, fabulous sounds, astounding vector graphics! PDOM 73 - Star Trek Enterprise Leaves Dock. PDOM 74 – Star Trek the Starship Enterprise

flying around in a circle. PDOM 76 - Star Trek Shuttle landing on the SS Enterprise. PDOM 83 - Space Ace

demo. Excellent aniamtion with excellent sampled sound!.

We've 100's more demos!

PD Disk Prices: 1 to 5 disks £3.00 each, 6 to 10 disks £2.75 each and 11 or more disks £2.50 each! Send now for our FREE information booklet. Orders sent by 1st class post on top quality disks. Blank disks 10 - £7, 50 - £33 100 - £61 Blank labels 100 - £3, 1000 - £15 Mouse Mats A4 – £3.50 Cleaning Kits - £2.50

All prices are fully inclusive. To order please send a cheque or postal order payable to Pdom PD Amiga or Access & Visa credit card details to: Pdom PD Amiga Dept AF, P O Box 801, Bishop's Stortford, Hertfordshire, CM23 3TZ. Telephone 0279 757692.

A SPECIAL OPENING OFFER UNTIL AUGUST 31st

ALL CUSTOMERS ORDERING OVER 10 PD DISCS CAN CHOOSE AN EXTRA PD DISC FREE

AND ALL ORDERS GO INTO OUR PRIZE DRAW TO WIN A 3.5" DISC DRIVE! SO ORDER NOW

All PD discs

Each!

CRUSADERS BACTERIA • BRILLIANT IIIII AF26
DIVINE VISIONS (2 DISCS) MYTHOLOGICIAL AF27
SILENTS FANTASY (2 DISCS) GREAT SULDES
AF28
MENTAL HANGOVER • STENCIL VECTORS I AF29
SULPSTERAM DEMOS • EXCELLENT
AF30
START 3 (2 DISCS)7 SINS/COMA/CEBIT 90
ALCATRAZ MEGADEMO (3DISCS) SUPERB
PREDATORS MEGADEMO (2 DISCS) SCOOL AF33
PUGGS IN SPACE • A NICE SPACEE DEMO AF34
SILENTS MEGADEMO • SUPERB DEMOS AF35
DRAGONS MEGA • AMAZING DEMOS AF36
FRAXION HORROR DEMO • A BIT SICK
AF37
KEFRENS 8 (2 DISCS) WICKED DEMOS 1
START DEMO PACK 1 (2 DISCS) MEGA1
START DEMO PACK 1 (2 DISCS) MEGA1
AF39
START DEMO PACK 1 (2 DISCS) MEGA1
AF34
START DEMO PACK 1 (2 DISCS) MEGA1
ALL NEW STAR TREK GAME (2 DISCS) BRILLIANT
ALL NEW STAR TREK GAME (2 DISCS)
SULLIANS GATE SLIDESHOW • SEE REVIEWS
AF43
SERRE SLIDES • ANOTHER GREAT SHOW
AF44
BEAL 3D SLIDESHOW • GREAT 3D HAM
AF45
CAT SPACESHIP ANIM (1 MEG) BRILL
AF48
AGATRON AR RUNNER ANIMS • EXCELLENT AF47
CX1 SPACESHIP ANIM (1 MEG) BRILL
AF48
AGATRON ANIM 26 (LOTUS CAR CHASE) AF59
• WE ALSO STOCK MOST OF THE DISCS REVIEWED IN

GATE MEGA DEMO I COOOOOL I!

JUGGETTE ANIMATION • VERY GOOD
DIGITAL CONCERT 3 • FAB MUSIC
BEATMASTER MAGNETIC DEATS 3 III
START MUSIC • THE BEST AMIGA MUSIC II
START MUSIC 2 • MORE TRAX BY ME III
NIGEL SIXSMITH MUSIC • GOOD STUFF
VANGELIS (1 MEG) BRILLLANT MUSIC/ART
NOISETRACKER PACK (3 DISCS) SUPERBIFUTURE COMPOSER • BRILL MUSIC TOOL
DARK STAR UTILS 3 • GOOD STUFF
START UTILITIES COLLECTION
DOPE INTROMAKER • VERY USEFUL TOOL
TV GRAPHICS (2 DISCS) FONTS ETC.
FISH 295 MANDEL MOUNTAINS • GREAT
PARTY GAMES 2 (OVER 18 ONLY)
BUSTERS XXX RATED ANIMATIONS II
XXX ANIMATIONS (OVER 18 ONLY)
TWISTED DREAMS (OVER 18 ONLY)
NUDE SLIDESHOW (OVER 18 ONLY)
NUDE SLIDESHOW (OVER 18 ONLY)
STARTUP SEQUENCE • AUGUST § 1.50
STARTUP SEQUENCE • AUGUST § 1.50
STARTUP SEQUENCE • AUGUST § 1.50
A NEW DEMO FROM 777????????

N THE AMIGA FORMAT PD SECTION •

. WE ALSO STOCK MOST OF THE DISCS REVIEWED IN THE AMIGA FORMAT PD SECTION .

ALL PD DISCS ARE 99p PER DISC . PLEASE ADD 50p P&P TO TOTAL ORDER VALUE SEND YOUR ORDER ALONG WITH YOUR CHEQUE/P.O TO THE ADDRESS BELOW AND WE WILL PROCESS & DISPATCH IT TO YOU FIRST CLASS BY RETURN POST OR, CALL TELESALES WITH YOUR ACCESS/VISA NUMBER FOR NEXT DAY DELIVERY



BONNERSFIELD • SUNDERLAND •
 SR6 0AA •

091 564 1400 •

A 'BIT' ON THE SIDE

· PUBLIC DOMAIN SOFTWARE ·

8 THOROLD PLACE · KIRK SANDALL · DONCASTER · DN3 1NU TELEPHONE: Monday to Friday - 6pm to 8pm 0302 887 332

> Pic - Shows, UTILITIES, GAMES, MUSIC / GRAPHIC DEMOS & LATEST TITLES

All our disks are £1.75 each inc P&P No hidden costs

Top-quality branded disk duplication, all virus free.

OFFER A Catalogue disk containing full list,

PD game and a music graphic demo.....£1.75

OFFER B 5 disks : PD games, music, utilities,

music/graphics demo......£9.00

FREE MEMBERSHIP We already have members in Holland, Norway, Australia and Germany. Same day return

SENLAG SOFTWARE PD

14 OAKLEA CLOSE OLD ROAR ROAD ST LEONARDS ON SEA EAST SUSSEX TN37 7HB TEL: 0424 753070 SOLE DISTRIBUTOR FOR F.R.P. PRODUCTIONS & SENLACWARE



MISCELLANEOUS

MUSIC

MUSIC

HIFI PLAYER

COMPACT DISK PLAYER

RIP ERUPTIONS

ROB HUBBARD MUSIC

ACCIID MUSIC

JUNGLE COMMAND (2 DISKS)

GAMES MUSIC CREATOR

FUTURE COMPOSER

SOUNDTRACKERS (2 DISKS)

8 CHANNEL SOUNDTRACKER

PERFECTSOUND SAMPLER

AUDIOMASTER DEMO

FLASH TEAM MUSIC

GRAPHICS

IFF PIXS II IFF PIXS III IFF PIXS IV IFF PIXS V IFF PIXS V
JOE II SLIDESHOW
HAM PIXS
DIGI PIXS I
DIGI PIXS I
DIGI PIXS II
PHOTOFILE PIXS II
ROGER DEAN PIXS
ROD MATTHEWS PIXS
FANTASY PIXS II
FANTASY PIXS II
FANTASY PIXS II
SASA DIGIPIXS
SPACE VISIOMS
PARADISE SLIDESHOW

GLAMOUR DISKS

PLAYBOY SLIDES
SABRINA/SAMFOX SLIDES
SAMFOX SLIDES
UTOPIA
KIM WILDE SLIDESHOW
NAUGHTY NICITITIES
TINA SMALL

GAMES DISKS

MONOPOLYCLUEDO BATTLEMECH MORIA' LARN ALL NEW STAR TREK (2 DISKS) STAR TREK SPACE 'IMEG (3 DISKS) STAR TREK SPACE 'IMEG (2 DISKS) EMPIRE RISK PD RISK PD CRIBBAGE

SENLAC DISK PRICES

CANDO CANDO CANDO

SENLAC ONLY 3.00. CANDO RETAILS AT 149.95 OUR PRICE 121.99

ANIMATION DISKS

ANIMATION DISKS

NOT BOING AGAIN '
PROBE SEQUENCE
WALKER I '
WALKER II'
ROSES-FLOWERSHOP
COKEMAN-SMURF
KNIGHT ANIMATION '
CAR DEMO '
ZEUS BUST '
DRAGONS LAIR
KILLER DEMO '
GHOSTPOOL '
COYOTE ' (2 DISKS)
CHARON '
SCHARON '
COYOTE ' (2 DISKS)
CHARON '
CONGRAMAN ANIMATION '
JUGGLER ANIMATION '
JUGGLER ANIMATION '
JUGGLER ANIMATION '
JUGGLER ANIMATION '
DISYPEE ANIMATION '
JUGGLER ANIMATION '
DISYPEE ANIMATION '
ORBITER/SPACESTATION '
THE BOINGS'
APPLECUS ANIMATION '
WALKS ANIMATION '

UTILITIES

ESA UTILS
FULLFORCE UTILS
FULLFORCE UTILS
FULLFORCE UTILS
FULLFORCE UTILS
FULLFORCE
DISKSALV V4.2
GHOSTWRITER
SID (DIRMASTER!)
NIB BACKUP (2 DRIVES)
CROSS DOS
VIDEO PROGRAMS (2 DISKS)
GRAPHICS UTILS (2 DISKS)
RAYTRACING
LC-10 CUSTOM DRIVER
PRINTER DRIVER GENERATOR

FINANCIAL/BUSINESS

RIM DATABASE (HARD!!) SPREAD-SPREADSHEET INVENTORY

DEMOS-DEMOS-DEMOS

SENLACWARE DISKS

These disks are now 5.00 each, a niribution is now passed to the Auth the program if you wish to parilicipa ntact SENLAC now for more details FRP ROTATING/MOMEN FRP ROADRUNNER FRP KARNSATTACK FRP PAULA VI CREATOR 40 MODELLER DEMOS (2 disks) DEMOS (2 disks)
Prices include UK Post/Packing add1.00 Overseas Europe
Airmail charge

SENLAC SIX PACKS

ANY PACK ONLY £8.99

ART PACK

OH OBSCENE II
OH OBSCENE II
INSANITY II
SPRITE MACHINE 1. Photomontage I 2. Photomontage II

3. Photomontage III

4. Fantasy Pixs IV

5. Fantasy Pixs V

6. Fantasy Pixs VI

UTILS PACK

1. Ultimate Utilities 2. ESA Utilities

3. Fullforce Utilities I

4. Digital Technology

5 Energy Utilities 6. Ardvark Hackers Toolkit

DEMO PACK

1. Red Sector Cebit 2. Red Sector 2 Disk Demo 3. Rebels Mega Demo 4. Puggs In Space

5. It Megademo

ANIM PACK

1. Space Ace Demo 2. Agatron Star Trek Demo 3. Probe Sequence 4. Stamp & Balloon 5. Happy Guy & Windowman

6. Zeotrope Animations

STARTERS

1. CLI Tutor 2. CLI Utilities 3. Games Music Creator 4. Vallejo Slideshow 5. Flaschbier 6. Compact Disk Player

HARDWARE BITS

NEC External Drives 69.99 512K RAM Expansions 54.99 Banx Boxes 9.95 Contriver Mouse 19.99 A590 Hard Drive 389.00 Joysticks from 7.95 Call for latest prices

CATALOGUES

If you require a catalogue then please send £1.00 now! Refunded on first order.



Continuing a veritable orgy of PD coverage, we now look at all the latest and greatest new stuff. RICHARD MONTEIRO takes us on a trip around the libraries...

FANTASY FLIGHT - Seniac

Another of Senlac's licenseware disks. The prolific FRP Productions are responsible for the impressive animation on this disk. An F-15 swoops around a fantasy landscape. As you can see from the sequence of images, FRP are extremely proficient at their trade.







TBAG 40A/40B GTS

The new-look Tampa Bay Amiga Group's (TBAG) PD compilation disk has just hit town. A new user interface called Activator has been designed to make program selection as simple as possible. Activator is perfect for both CLI and Workbench files as programs can be executed, and help files can be viewed and printed, without the need for flipping from one environment to another.

Activator does have an unfortunate side effect - it gobbles over 150K of memory. On a 512K machine this can prove critical. Still, you don't have to have the menu running all the time.

DISK A

ANYMONTH

A simple perpetual calendar program with which you can print a calendar year or simply browse through the months. Only works for years after 1592. It doesn't work for years prior to 1593 because, during that period, the calendar had 11 days eliminated and all sorts of modifications made to the months.

DISKTALK

This is very silly - and a bit suspect too. It's another of those jolly Workbench hacks. DiskTalk will monitor disk activity and whenever a disk is ejected or inserted it will play one of two samples. You supply the desired sounds.

FENSTER

Have you ever wanted to save a screen or window as an IFF picture, print a screen, change the limits of a window, alter the IDCMP flags of a window, refresh gadgets, or move a window to the background? Of course you have! And this utility lets you do all the above and more.

PCOPY

An AmigaDOS disk copier. It's fast, multitasks and attempts to recover corrupted data. That's really all there is to it.

PT

Simply a replacement for the ubiquitous TYPE >PRT: <filename> command. It has one major advantage: it skips over page breaks. In addition, PT numbers pages and prints the filename at the top of the first page.



TBAG put the kettle on, TBAG put the kettle on...

SUPERVISION PD

Unit 2, Zillee Industrial Estate, Monkton Street, Ryde, Isle of Wight, PO33 1LW TELEPHONE: (0983) 812867 (24 hour service)

DISKS

1 → 5.....£1.50 → 10.....£1.25 11 plus£1.00

TOP 10 PD GAMES Retaliator/Pacman Flaschbire Autobahn 3005 Casino Craps
PD Chess/Tetris II
Monopoly/ Cluedo
All new Star Trek (2 disks) Star Trek Space = 1 meg (3 disks) Star Trek: 1 meg (2 disks)

TOP 10 GLAMOUR GIRLS

Cribbage

Playboy Slides Sabrina/Sam Fox Sam Fox Slides Utopia
Kim Wilde Slide Show
Naughty Niceties
Tina Small Mayfair Bodytalk A+B (2 disks) Calendar Girls 1990

TOP 10 MUSIC

Hi-fi player Compact disc player **RIP Eruptions Rob Hubbard Music**

Acciid Music

Jungle Command: 2 disks **Games Music Creator Future Composer** Soundtrackers: 2 disks 8-channel soundtracker

TOP 10 FINANCIAL/BUSINESS Wordwrite/Amiga Spell Bank-n Analyticalc Rim Database QBase/Visicalc Clerk Spread-Spreadsheet Inventory Journal Nag

FREE MEMBERSHIP SEND SAE FOR CATALOGUE

EW IMAGE P.I

7 DISK CLIPART PACK ONLY £10.00

CLIPART INCLUDES: Sport, Cartoons, People, Buildings, Animals + much more! All pieces are in two colours and can be used in any screen resolution. Ideal for DTP!

★ IMPORTANT ANNOUNCEMENT ★
Our office will be closed from 10th August until the 25th August. All orders arriving during this period will include 2 FREE blank disks and labels. We are sorry for any August. inconvenience this may cause

Catalogue Disk only £1.00 including FREE software! (also included: Competitions, User Group + Tips!)

Normal PD Prices: 1-4= £2.50 5-9= £2.00 (Prices per disk)

CHEQUES/P.O'S payable to: NEW IMAGE SOFTWARE, 40, APPLEBY GARDENS, DUNSTABLE, BEDS, LU6 3DB.



FAST, PROFFESIONAL AND FRIENDLY AMIGA PD SERIVCE

HIGH QUALITY PUBLIC DOMAIN DISKS

Two Disk Catalogue £2.00

We'll get any PD disk for you - NO EXTRA CHARGE NO EXTRA FEES - Write for overseas postage FREE MONTHLY PRIZE DRAW

ALL Libraries available (Fish, TBAG, AGATron etc.)
Latest demos, animations etc.
Discount Hardware/Software/Disks etc.

eg. PHOTON PAINT 2 £49.99 SONIX £39.99
DIGNIEW GOLD V4 Inc. DIGIPAINT £119.99
Prices start at \$ 0000
NEW Amiga BBS (0295) 275045 (24hrs) Cheques/POs Payable to NOVA

Nudge Nudge Lemo
(2-ds/s)
Viz Sil-seshow
Rebellion Music
Newtek Reel 3
(1 Meg) (2 ds/s)
Sozobon C - Full version
8 Channel Soundfracker
AMOS Demo
AGAIron Star Trek (2 ds/s)
Roger Demi Sil-teshow
All the above are
\$2 per ds/s

A SAMPLE....

Jazzenan Nudge Nudge Lemo

NOVA (AF7), 30 Parsons St, Bambury, Oxon OX16 8LY 25(0295)262029

Amiga P.D. Software only £1.50

ST/Amiga Fanzine £1.00 + 20p P&P ISSUE 7 with FREE Disk FREE P.D. List

Sound Sampling for the ST/Amiga £2.50 per disk (10 samples)

Picture Digitizing for the Amiga £3.00 per disk (6 pictures)

For details contact us at:-Sector 16 160 Hollow Way Cowley Oxford

Tel: 0865 777146 Please make Cheques / P.O.'s payable to ANDREW HAMILTON and SIMON GLEED

crozy Joes

DEPT. AF, 145 EFFINGHAM STREET, ROTHERHAM, SOUTH YORKSHIRE, S65 1BL TELEPHONE: (0709) 829286

Public Domain Software for the Commodore Amiga

SEND S.A.E. (9" X 6") FOR LIST OF TITLES OR £1 FOR CATALOGUE DISK

69 78/79

261/262

346/347

END S.A.E. (9" X 6") FOR LIST OF

14 Games Music Creator
16 Space Ace Demo
45 Golden Fleece Adventure
61 J.M. Jarre-Docklands
68 Adventures Disk 1
69 Games Disk 2
//79 Vallejo Fantasy Art
81 UEdit Word Processor
84 Mega Art Disk
//66 Red Sector Megademo
108 RAF Megademo
117 Monopoly
123 Calendar Girls 1990 (X)
135 Classic Board & Card Games
152 Virus Killers
157 Cool Cougar Animation (*)
162 Kylie Demo
172 Flaschbier Game
236 Showering Girls (X) (*)
240 Puggs in Space
251 Blizzard Game
262 Deathstar Megademo
282 Forgotten Realms Slideshow
314 Breakout Construction Set
315 Return To Earth Game
329 Pseudo-Ops Virus Killer 2.1
343 Intromaker
347 TV Graphics 1 & 2 Deathstal Megaster Sideshow 282 Forgotten Realms Sideshow 314 Breakout Construction Set 315 Return To Earth Game 329 Pseudo-Ops Virus Killer 2.1 343 Intromaker (7947 TV Graphics 1 & 2 353 T.B.A.G. 31 (Showiz 2.0) 369 Stamp Collector Animation (*)

380 PD Spectacular Volume 1
399/400 Newtek Demo 3 (*)
456 Chet Solace Extravaganza
483 Elvira Demo
496 Holy Grail Adventure (*)
498 Wanderer Game
528 Utopia-Certificate 15
534 Vision Music Masters
540/541 Monty Python-Nudge Nudge
570 Avenger Megademo
680 Dope Intro Maker
646/647 Predators Megademo
664/P Powerlords Power Musix 2
680/681 Learn & Play (under 8's)
682/683 Sound Applications
684/685 Video Applications
694/698 Graphics Management
700 Digital Concert IV
713/714 Flash! - Queen
742 Madonna Slideshow
744 Red Sector Cebit Demo
746 Crusaders Bacteria Demo
747 Popeye Meets The Beachboys
748 Busy Bee Animation (*)
755/757 Scanners Animation (x)
715/726 Diggy Piggys Slideshow
727/728 Tobias Richter's Star Trek
Lire 1 meg of memory

Disks marked (*) require 1 meg of memory

HOME BUSINESS PACK

Nag, Bank'n, Journal, QBase, Spread, Wordwright, AmigaSpell, Inventory, MomoPad, + more 8 Disk Set£12.00 SOUNDTRACKER SPECIAL

The great PD music creator, plus rippers, sample songs and loads of instruments

YOU MUST STATE YOU ARE OVER 18 WHEN ORDERING (X) DISKS



NEW SHOP NOW

ALL DISKS £2 EACH OR £15 FOR 10 CALL IN AND SEE US AND PAY EVEN LESS!



HOURS OF OPENING: 10.00 am TO 5.00 pm. CLOSED THURSDAYS AND SUNDAYS

HEM SHOPEN RIVERDENE PDL for the Amiga 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN Telephone: (0734) 452416 Fax: (0734) 451239

DEMO PACK 1: REBELS COMPILATION, RSI CEBIT 90 & DEXION II DEMO PACK 2: FRACTAL FLIGHT & D-MOB 4 (2 DISKS) ART PACK 1: FHAC IAL FLIGHT & D-MOB 4 (2 DISKS)
ART PACK 1: NASA, STAR WARS & ROGER DEAN SLIDESHOW
ART PACK 2 (1 MEG RAM): NEWTEK REEL 3 (2 DISKS) & THE RUN
HOME UTILITIES PACK: WORD WRIGHT, QUICKBASE & BANK N
GAMES PACK: QUIZ MASTER, TRACK RECORD & BREAKOUT
MUSIC PACK: SOUNDTRACKER, SOUNDTRACKER SAMPLES & OCTYLIZER

All Packs only £5.50 each inclusive of 1st Class Postage & Packing Please state Amiga when ordering

FREE PD CATALOGUE ON DISK

(please state Atari ST or Amiga) when you send a blank disk and SAE to RIVERDENE PDL ACCESS & VISA welcome

Demos

Want to see what your Amiga can really do? Well this is the place...

DIGITAL CONCERT Riverdene PDL Flash Music

A sampled sonata you'll either love or loathe. The track is over 12 minutes long and features chords, riffs, beats, phrases and just about anything else that can be sampled from numerous dance chart hits. The production and mixing is first class. Digital Concert 3 by Flash would make a sensational dance track if it was ever released on vinyl.



Flash Productions gunning for a number one with Digital Concert 3.

MUSIC DEMO ONE Crazy Joe's 679

Five SoundTracker compositions by James Goddard grace this disk. The tracks include China, Metallic, Exodus, Nightmare and Paradise. Well worth a listen.

AGATRON SLIDESHOW 6 Amiganuts 603



Tobias Richter, master pixel punisher and fanatic Star Trek enthusiast, has come up with vet another fantastic disk crammed with stills from Star Trek. Unlike



Tobias' previous work, these images are in overscan HAM interlace. And none are digitised. The results boldly go where no pictures have gone before. Add this disk to your collection now!

DIGI WHEELS DEMO 16 Disk Sector 72

Fast car lovers will drool over Sector 16's mini-demo consisting of four still images of very fast, very expensive, very desirable street machines. Appropriately, Yello's The Race plays in the background all the while.







A mere quarter of a million and you can have the lot. Bargain!

SNOWFALL

Well, there isn't much to say about this one. It isn't big and isn't clever. SnowFall loads a picture and lets snowflakes settle on images in any colour except black.



Less than 200 days to Chrimble. Get those greetings in first.

STARBLANKER

Yet another screen blanker. When the preset timeout expires, StarBlanker replaces your current display with one of two different scrolling starfields.

ZAP

You can examine and modify binary files in hexadecimal and ASCII mode using Zap. The file being edited is kept in memory, so moving through the file and searching is very fast.

DISK B **SCENEGENERATOR**

There's not a lot on TBAG disk 40B: SceneGenerator is just one of two. As the program's name suggests, it creates fractal landscapes. You have some control over what is produced, but the real magic is done by the program. The results are excellent as you can see from the images on the page.

TBAG ANIMATION

The TBAG animation was created and animated with Sculpt-Animate4D. The animation is 90 frames long and was rendered in Photo-Raytrace mode. Rendering took one and a half days using an Amiga 2500. As you might imagine, it's very pretty but useless.



Create worlds of your own with the fractal SceneGenerator.



EMULATOR Softville USPEC 13

Fans of Clive's ill-fated QL will relish Rainer Kowallik's attempt at producing a working - and let's face it, very cheap - QL emulator for the Amiga. For those who want to read nothing more of Sinclair's mark III door stop, skip the next few paragraphs.

Emulation is carried out entirely by clever software routines. Virtually everything that should work works. The screen, keyboard, devices -SuperBASIC - run without hitch most of the time. No emulator is infallible, but Kowallik's conversion of QDOS is better than many.

The emulator was created from a disassembly of the OL JS-ROM, so it should be as reliable as the JS-ROM. In short, not very. That's a lie... the JS-ROM is reasonably stable. QL screen emulation is handled by the Blitter, which means screen updates happen blindingly quickly and cost little CPU time.

Apart from the MicroDriVes and the NETwork, all standard QL devices are implemented: CON_, SCR_, PIPE_, SER1, PAR, FLPn_. The RAM disk and system clock operate also.

As if that wasn't enough, a JANus device driver has been implemented which allows you to read and write to hard disk via the IBM Sidecar. A FLoPpy driver provides a similar service. To top it all, the Amiga mouse pointer is integrated into the emulator. An excellent utility; one that is bound to appeal to propellerheads.

MESSYDOS Nova

You're doubtless aware of utilities like DOS-2-DOS and CrossDOS which, apart from commanding extortionate fees, let you transfer





data files between the Amiga, Atari ST and PC. How about a utility similar to CrossDOS et al but without the price? It could only happen in the public domain. The unfortunately-titled MessyDOS by Olaf Seibert is such a system.

Called MSH (Messy File System) for short, Olaf's system makes it possible to use PC disks in your Amiga just as if they were regular Amiga disks. Since the ST also reads and writes PC disks directly, you can also use ST disks in your Amiga.

There's very little to say about MSH. Insert a PC disk into the Amiga disk drive and you can read what's on there already or write information to it. The system is simple yet effective.

UGA GAMES 4 Softville UGAM 4

From time to time those kind and benevolent beings who call themselves the United Graphic Artists (UGA) compile a disk with all sorts of wonderful PD material. UGA Games 4 is one of their latest and on the disk you'll find the following games:

SNIFBURK





It's the zany zit-zapping zenzation that's zweeping the nation. Fail to clear up the spots quickly enough and Snifburk's face will explode all over the screen. It's disgusting.

This ranks as the silliest game to have appeared so far this year. And it comes from France.

The idea is simply to splat zits - or pustulas as they're known in this game - that grow at an alarming rate on poor Snifburk's face. You're armed with a bottle of Biactol which you must aim and squeeze at the growing zits. Unfortunately the bottle empties far too quickly for comfort; and the effects of having a faceful of muck can be devastating.

Can you make it into the pustula busters hall of fame? Do you really want to?

XENON III

Not a follow-up to the Bitmap Brothers' best-selling blaster, but simply Harry Hart's interpretation of what the sequel to Xenon II should look like. And very good it is too, all things considered.



Harry Hart, best known for his fantastic animations, has tried his hand at writing a shoot-em-up using Palace's SEUCK. The results are superb.

The idea is simply to shoot everything that gets in your path and avoid anything that can't be destroyed. The sampled effects that accompany the game are really polished. Most amusing and realistic is the cat wail that accompanies the feline sprite.

Astonishingly, Xenon III is written using Palace's SEUCK. Without doubt the best SEUCK creation to date.

TETRIX METALLICA

No surprises here apart from the polish and playability of the Tetris clone. Tetris is Tetris. Shapes fall from the sky; you have to position them so they form straight lines at the bottom of the screen. Very simple, very addictive



A very neat Tetris clone that looks and sounds better than the original yet manages to maintain all the playability.

BOING! THE GAME

Remember Boing! The Demo... the big checkered bouncing ball? Yep, that one. Boing! The Demo was written long ago by three of the original Amiga gurus: Sam Dicker, Dale Luck, and RJ Mical. Boing! The Game was written to celebrate the classic demo and has little to do with bouncing balls. Extremely playable.

TOP TEN PD	TOP TEN DEMOS
GTS Titles	17Bit Disk Number
1 The All New Star Trek	1 Intros 35 (644
2 Video Applications	2 Rubadubdub (604
3 Space Trilogy	3 The Run (591
4 TV Graphics	4 Predators Megademo (588/589
5 Avoiding the CLI	5 Time Circle Musax (662
6 DTP Accessories	6 Intros 37 (659
7 Graphics Management	7 Fraxion Horrorshow (657
8 Learn & Play	8 Maria Whitaker Slideshow (671
9 K/O The Virus	9 Viz Calendar (645
10 Education With The Am	niga 10 Digital Concert 2 (576

GOLEM'S GATE SLIDESHOW **NBS D314**

Lots of pretty hand-drawn pictures from the West German programming crew Golem to pore over. Why it's called the -Gate Slideshow is anyone's guess.





The beginning and end of Golem's Gate Slideshow.





Even Shilts would have a hard time stopping that one.

SLIDESHOW Nova

That manic French illustrator Serre has enthralled audiences for ages with his amusing cartoons that have appeared in countless journals across the puddle. You can now see what the fuss is all about by viewing some of his masterpieces in digitised format on the Amiga. Sadly the scanned images are a little blurry, but not enough to detract from the humour.

SILENTS MEGADEMO PD-Soft 464

Some of the most imaginative scrolling messages so far appear in the Silents' collection of demos. It's not the content of

the messages that's impressive (it never is), but rather the way in which they move. The vast number of demos are all very different. Some are excellent like the contorting rubber face which is accompanied by sampled speech. Others, like Acid Syndrome, are tired subjects.



Bob Wade trying to explain the complexities of nine-plane parallax scrolling, collision detection, barrel shifting, copper lists, and the difference between fat Agnus and really obese Agnus. Not doing very well, really, is he?

Sagittarian PD

SAE FOR CATALOGUE

DEMOS - UTILITIES - GAMES -LANGUAGES

SAGIGAM 4 - The all new Star Trek (2 SAGIGAM 5 - Our translation of the all new

Star Trek's German Instruction
SAGIGAM 7 - Zerg, RPG based on Ultima,

SAGIDEM 17 - CEBit 90 demo, coma demo,

SAGIDEM 18 - Newtek real 3 (2 discs, 2

SAGIDEM 8 - Puggs in Space SAGIDEM 19 - The Jugglette SAGIUTIL 7 - Game Music Creator FISH 23 - Lattice C v3.03 with Include files.

FISH 161 - Nag appointment program

FISH 337 - C Manual FISH 344 - ROM Kernal reference manual companion * Unavailable elsewhere* PAB1 - HAM cartoon style slide show

PAB2- Sampled English speech phoneme

SOUND SAMPLING SERVICE AVAILABLE SEND DETAILS OF YOUR REQUIREMENTS PLEASE ADDRESS MAIL TO: PAUL BROWN, 104 WOOD STREET, LONDON, E17 3HX

MARK ENVELOPE AF1

CHEQUES/P.O.'S PAYABLE TO P.A. BROWN

TEL: 081 520 3858

seven Seas

Go STAR TREK crazy STAR TREK GAME ONE

Brilliant space trading game as reviewed in Amiga Format. 2 Disks only £3.50

STAR TREK GAME TWO The biggest PD game ever, needs 2 drives and 1 Meg. 3 Disks all for £5.25

STAR TREK GAME THREE

Game of the movie, needs 1 Meg to run. 2 Disks only £3.50

Also in stock Fish, TBag, AGAtron libraries. £1.75 for 1-10 disks and £1.35 when ordering 11 or more disks. Send SAE for our latest PD catalogue

Cheques/P.O. to: Seven Seas PD, 60 Canary Road, Dungannon, Co. Tyrone, BT71 6SU Tel: 08687 84540

TTERCHIPS

P.O. BOX 64, KEIGHLEY. BD21 4NB

TEL/FAX: (0535) 667469 10am - 7pm Monday to Friday 9am - 4pm Saturdays ay to Friday 9am - 4pm Saturday

2 Space Bubbles (Fantasy Nude Pics)

Animate Window Pack 1

Scoopex Mental Hangover (Superb)

2 Mayhem Demo Disk

3 Anarchy Demo Disk

3 Sun Slide Show 2

1 T.H.R. Demo Disk 11

1 Magnetic Fields Demo 36

2 Dragons Mega Demo (Good)

3 Cult Mega Demo (Good)

4 A.E.C. Demo 2 (Good)

Beatmasters Club Mix Music

2 Track Hacks By The Byte Factory

3 Internal Vendetta (ITV) Music

Bordellow Beauties 1 (18 Yrs)

5 Bordellow Beauties 2 (18 Yrs)

5 Bordellow Beauties 4 (18 Yrs)

5 Bordellow Beauties 5 (18 Yrs)

5 Bordellow Beauties 5 (18 Yrs)

5 Bordellow Beauties 5 (18 Yrs) 112 Kaktus And Mah Byterapers Muzzax 6 Utopia 4 (Over 18 years) Bootbench V2.0 Demo Creator Bootbench V2.0 Demo Creator
Larn The Adventure Game
SAE Scoopex Demo 36
SAE Scoopex Demo 40
Luxo Teenager (Ray Traced 1 Meg)
SAE Scoopex Demo 35
Arcadia Mega Demo 1
Forgotten Realms Slideshow
Black Monks Picture Show
Kefrens Demo
Outsider Acid Music Demo
Fresh Cola Music (2 disks)
Sunrise Volume 8 Demo
Pendle Europa Disk 53 131 132 133 134 141 142 143 19 20 21 22 23 25 27 28 142 Track Hacks By The Byte Factory
143 Internal Vendetta (ITV) Music
156 Bordellow Beauties 1 (18 Yrs)
157 Bordellow Beauties 2 (18 Yrs)
158 Bordellow Beauties 2 (18 Yrs)
159 Bordellow Beauties 5 (18 Yrs)
160 Bordellow Beauties 5 (18 Yrs)
160 Bordellow Beauties 6 (18 Yrs)
161 Bordellow Beauties 6 (18 Yrs)
162 Bordellow Beauties 6 (18 Yrs)
163 Bordellow Beauties 7 (18 Yrs)
164 Bordellow Beauties 9 (18 Yrs)
165 Bordellow Beauties 9 (18 Yrs)
166 Bordellow Beauties 9 (18 Yrs)
167 Bordellow Beauties 9 (18 Yrs)
168 Bordellow Beauties 9 (18 Yrs)
170 Bordellow Beauties 9 (18 Yrs)
170 Bordellow Beauties 10 (18 Yrs)
171 Ian And Mick's Mega Demo
189 Link's First Mega Demo
189 Link's First Mega Demo
190 Tax. F. Mega Demo (2 Disks)
206 The JCS Shellshocked Demo
241 Trax Demo Disk 4
226 BFPO Disk 2 Nude Pics (18 yrs)
239 Club Mix 2 By The Beatmaster
240 Avenger Mega Demo
241 Noise Tracker V1 4+ (2-2-1990)
245 Crusaders Bacteria Music Great
251 Bitterchips Virus Killer Disk
252 Beatmaster's Magnetic Beats 2
254 Beatmaster's Magnetic Beats 3
255 The Starline Mega Demo
270 Showering Girls 1 Meg Req XXX
275 Darkstars Demo Disk 1
276 Darkstars Demo Disk 2 Fresh Cola Music (2 disks)
Sunrise Volume 8 Demo
Pendie Europa Disk 53
SAE Scoopex Demo 25
PCS House Music
AMOS Game Creator Demo
Forgotten Realms Slideshow 2
Pugs In Space Animated Demo
Trilogy Mega Demo (2 disks)
Kefrens Mega Demo (2 disks)
Pendle Europa Disk 50
Enemies Music Disk 3
Vision Mega Demo 4
Darkstar Utilities Disk 4
Cryptoburners Music Disk 4
Cryptoburners Music Disk 4
Cryptoburners Music Disk 4
Pendaters Mega Demo (2 disks)
Pendie Europa Disk 50
Darkstar Utilities Disk 4
Darkstar Utilities Disk 4
Cryptoburners Music Disk 4
Darkstar Willities Disk 1
Dearbar Mega Demo (2 disks)
Dexion Music Disk 4
Deathstar Music Disk 4
Deathstar Music Disk 4
Deathstar Mega Demo (2 disks)
Dexion Mega Demo (Great)
Darkstar/Silents Acid Music
Mighty Druids March 90 Demo
Exodus Scrolly Pic. Show (1 Meg)
TV. Graphics, Backgrounds and Fonts fo 29 32 33 34 43 44 45 46 51

103 106 111 227

TV. Graphics, Backgrounds and Fonts for Video Enthusiasts (2 Disks) Video Applications, Set of Video Utilities for above (2 Disks) Newtek Demo Reel 3 Disk (A) Requires 1 Meg Mem plus 2 Drives and 263 Newtek Demo Reel 3 Disk (B) Requires 1 Meg Mem plus 2 Drives and 262

FRED FISH:- WE NOW HAVE FROM DISK 257 THROUGH TO DISK 350 IN STOCK

Please note that some of the above are more than one disk. Prices are per disk. Please remember to check before sending your order. Order now. ONLY £1.25 EACH DISK. Including the Fred Fish disks. Please add 50p P&P per order regardless of quantity. Credit Card orders:- Please phone before 12 noon for same day despatch.

Open from 10am to 7pm Monday - Friday, 9am to 4pm Saturdays

Blitterchips is a subsidiary of Home Supplies (Regd) V.A.T. No 181 2908 62

Public Domain Software for the Amiga

from £3 per disk all inclusive

* Almost 700 disks!

* One of the longest established Amiga PD libraries * Membership not necessary * Fast service

We have one of the largest collections of PD software for the Amiga in the UK.
We currently stock:

O FISH 1-320

AMICUS 1-26 SLIPPED DISK 1-40 FAUG HOTMIX 1-102 PANORAMA 1-71

O AUGE 1-25 O T-BAG 1-35

All the above are £3 each + 1 FREE when you order 10

2 catalogue disks available at £5 which give details of the above collections

We can supply many of the Top Ten PD and the Top Ten Demos as featured in Amiga
Format at the SPECIAL PRICE of £2.50 each!

JOIN THE CLUB! interested in joining our user club? Write or phone for details *

Our own special selection £4.00 each

APDL #6 CLI HELP
 Confused by CLI? This one's for you
 APDL #7 LANGUAGES
 Lisp, Prolog, Logo, Forth
 APDL #8 AMIGA DISK DOCTOR

Life saving programs!
APDL #14 BEST ARCADE GAMES
APDL #15 BEST BOARD GAMES
Backgammon, Othelio, Yahtzee etc.
APDL #17 BUSINESS COLLECTION
Editor, Spreadsheet & Database
APDL #41 DATABASES
Keep track of your data

APUL #41 DATABASES
Keep track of your data
APDL #42 ADVENTURES Vol 2
Castle: A graphic adventure & several
text adventures
APDL #43 COMPILER ASSEMBLER AND LINKER
APDL #44 WORD PROCESSOR
Word Processor & Spelichecker
APDL #45 PUZZLE & STRATEGY GAMES
APDL #48 MAGNIFICENT FORCE II
20 Great tunes

20 Great tunes
APDL #52 FRACTAL GENERATORS
APDL #53 UNKNOWN 5 DEMOS

Superb eye-popping demos with great music APDL #57 JUNGLE COMMAND

Musical Invasion 3

APDL #58 CHET SOLACE SHAREWARE EXTRAVAGANZA. Some of the best re programmes on easy-to-use

menu driven disc.

SPECIAL. Startrek (1 MB) Superb PD game for those with 1 Mb. 3 discs £8.00
Write or phone for a FREE list

THE AMIGA PD LIBRARY

Dept. AF7, 72 Glencoe Road, Sheffield, S2 2SR PD Hotline 0742 750623

WE'VE GOT IT! O YOU WANT IT AND ITS ON TOK DISKS!

PACK A	PACK B	PACK C
Quantum + Tempest 6 Safehouse Music Club Mix	Popeye meets the Beech Boys, Cryptoburners Megademo II SAE 50	Digital Concert IV Operation Vark! Quantum + Tempest 5

DON'T WAIT FOR THE REVIEWS - GET THEM NOW!!!!

OTHER NEW DEMOS:- Evolution #52, Dragons Megademo, SAE 49, Fraxion Horror Video Quantum + Tempest Best Beats 1, Vision Music, TDD 16 Bit Music, Digital Concert III, Coma.

8 colour W/B magazine/catalogue Disk - just £1.50 fully inc

CHOOSE ANY PACK OF 3 DISKS FOR ONLY £5 INC OR YOUR OWN SELECTIONS FOR THESE SPECIAL PRICES: 1-4 DISKS £2, 5-9 DISKS £1.75, 10+ DISKS £1.50 EACH NO MEMBERSHIP SCHEMES MEANS NO OBLIGATIONS + NO HIDDEN FEES!

Please send cheques P/Os to: The Deeper Domain, 128 Portland Crescent, Stanmore, Middx HA7 1NA. For Enquiries call: (081) 204 3954 100% Backup support, fast and professional service, TDK disks

PD SPECIALISTS

PROM SERVICES

Eprom Services 88 Leylands Lane Bradford W. Yorks, BD9 50S

At Eprom Services, we offer a lot more than just PD software. As well as having one of the finest collections around, which we sell at rock bottom prices.

1-6 disks = £1.60
7-19 disks = £1.35

20-30 disks = £1.05

We also sell a large amount of accessories and commercial software at very small prices.

A SPECIAL INTRODUCTORY OFFER IS ANY 3 OF THE 8 DISKS BELOW FOR JUST £3.50

ESMO05 - Batdance Remix ESMOO1 - D-MOB Music One ESMO02 - Jungle Mania ESDO03 - Space Ace Demo ESDO04 - Robocop Fx. ESG006 - Flaschier ESU007 - Ghost Writer FSU008 -Virus X v.4

Send Cheque/P.O. For a full listing of PD software and accessories write to:

EPROM SERVICES FREEPOST LEEDS, LS27 8YA

DON'T SUPPLY A STAMP, WE DO THAT!!

MAIL

SOFTSELLERS LTD

MAIL ORDER

6 BOND STREET, IPSWICH, SUFFOLK IP4 1JE

5A DOG'S HEAD STREET, IPSWICH, SUFFOLK. (RETAIL)





36A OSBORNE STREET, COLCHESTER, ESSEX. (RETAIL)

MAIL ORDER PURCHASE LINE (0473) 257158/210605 FAX NO: (0473) 213457

JOYSTICKS		
Cheetah 125	£7.99	
Cheetah Starprobe	£11.99	
Pro 5000 Extra Glo Green	£13.99	
Pro 5000 Extra Glo Red	£13.99	
Pro 5000 Black	£11.99	
QS Turbo III		
Euromax Racemaker	£24.99	
Konix Navigator	£11.99	

5.0	O DONEO	***************************************	1000	
3.5" 40 Holder Lo	ckable with 10	3.5" DSDD	discs	£12 99
3.5" 40 Holder Lo				
3.5" 40 Holder Lo	ckable with 40	3.5" DSDD	discs	£33.99
3.5" 80 Holder Lo	ckable with 10	3.5" DSDD	discs	£15.99
3.5" 80 Holder Lo	ckable with 40	3.5" DSDD	discs	£35.99
3.5" 80 Holder Lo	ckable with 80	3.5" DSDD	discs	£55.99

DISC BOXES WITH DISCS

PERIPHERALS	6
Replacement mouse + mouse	
holder + mouse mat Four Player Adaptor	£29.95
Four Player Adaptor	£5.95
Mouse Mat	£4.95
Joystick Extender	£5.95
Dust Cover	£4.95

	DIS	SCS		
Quantity	10	20	50	100
3.5" DSDD Unbranded	£7.99	£14.99	£34.99	£59.99
3.5" DSDD Sony Branded	£11.99	£22.99	£54.99	£99.99

1			
ı	3.5"	40 Holder Lockable	£5.99
	3.5"	80 Holder Lockable	£7.99
	5.25"	50 Holder Lockable	£4.99
	5.25"	120 Holder Lockable	£6.99

DISC BOXES

CHEQUES AND POSTAL ORDERS PAYABLE TO SOFSELLERS. POST AND PACKING FREE IN UK. OVERSEAS £1.50 PER ITEM except hardware charged at cost.

Subject to availability and price charge without notice. *Some titles may not be released at time of going to press

Shop prices may vary, but personal callers can claim advertised discounts on production of cut-off slip.



YUPPIES COMPUTER CLUB

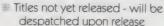


Kid Gloves £15.85 Black Tiger £15.85 Full Metal Planete £15.85 Rainbow Islands £15.50 Ninja Spirit £15.80 Blade Warrior £15.85 Cyberball £13.50 *Elvira £21.00 *Venus £15.85 Conqueror £15.75 Iron Lord £15.99 Shadow Of The Beast £15.00 Space Ace £28.50 TV Sports Basketball £18.50 Xenon II Megablast £14.85 Triad Vol 3 £18.90 Magnum 4 £15.85 688 Sub Attack £15.75	Impossamole £13.50 Pipe Mania £15.85 Hammerfist £15.50 Premier Collection 3 £19.00 Italia '90 £14.50 Super Cars £13.25 Xenomorph £15.85 Ninja Warriors £15.00 Beach Volley £15.50 Chase HQ £15.40 Day Of The Viper £15.75 Hard Drivin' £13.40 *Lost Patrol £15.50 Sim City £17.85 Stunt Car Racer £14.50 TV Sports Football £16.50	Shadow Warrior£15.85 *The Punisher£15.90 Destiny Warrior £15.85
---	--	---

Please add £1.00 P&P and send Cheques/Postal Orders to:

YUPPIES COMPUTER CLUB

81 Thurmond Crescent, Stanmore, Winchester, Hampshire, SO22 4DH.





Being able to program fluently in six languages is not the end of the story. Languages are just the bricks in the software house (ahem!) and this article is about the cement holding the whole lot together, the forgotten utilities that so many programmers just take for granted.

Programmers are like ketchup: they come in many varieties. Some write demos, some games, a few even write serious applications, but every programmer is only as good as the tools he uses.

Consider for a moment the Personal Computer World (and other) benchmarks. The skills of individual programmers to produce efficient code are deliberately removed, leaving the language standing on its own two (metaphorical) feet. Taking nothing away from the benchmarks, their accuracy must be questioned: first, they were contrived to be simple; and second, they can never properly simulate real applications, especially the increasingly complex ones seen today.

Moreover, most new programs rely on the skills of not just one, but many individuals. Compiled software relies on the speed and compactness of the libraries provided by the compiler manufacturer. In many cases the speed of the libraries relies on the efficiency of the operating system – which in turn is limited by the speed of the hardware. This pyramid effect has one result: unless programmers are prepared to "hit the metal", the overall quality of the finished product relies on many factors beyond their control.

It isn't all black, though. If things were as cut and dried as they at first appeared, all software would be slow, bland and unimaginative and we'd all give up and go home. A quick glance at almost any Amiga package reveals that this, thankfully, is not the case.



When it comes to games, what is the first thing everybody questions? Graphics. The gameplay, design and sound all come later – but graphics are what hits you in the eye. Most programmers (or software houses) now employ freelance artists to produce the graphics for them – and most use one of the standard art packages like *Deluxe Paint*.

The advent of *DPaint 3*, with brush animation, has left it as probably the brand leader in this field, and enough has been said about it already to avoid reiterating the praise here.

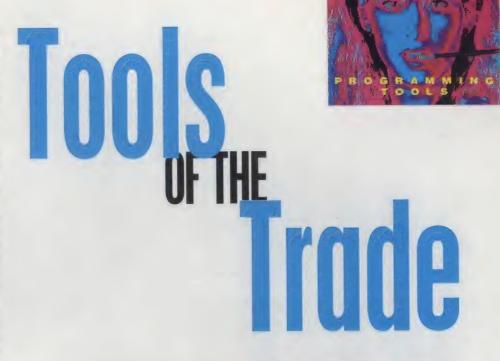




Illustration: Sally Gaden

Following on from last month's in-depth look at programming languages, a peek at the tools that programmers use with **MARK SMIDDY.**

However, there are cases where *DPaint* and others can't help. Imagine an image scanned by DigiView, or even one grabbed from moving video by, say, SuperPic. There is no doubt both of these can produce some

excellent results – but there are times when improvement is necessary. Perhaps, also, graphics have been produced on the ST and need converting to the Amiga. What do you do to process these images?



PIXMATE Progressive Peripherals £49.95

Pixmate is an image processor – a comprehensive set of tools for hacking and cleaning images. So comprehensive is it that it is impossible to find a function it lacks. Its main ST competitor is PD – but Pixmate packs almost all the equivalent functions into a single requester...

BELOW, TOP: A HAM pic, but now in only 32 colours via *Pixmate*. Spot the difference

MIDDLE: Now ready to go to the ST, but it's lost something.

BOTTOM: This Sanka pic has been hacked to half resolution. the writer. Similarly, hacking bitplanes from existing graphics can help programmers conserve precious memory – in many cases without adversely affecting the quality of the original work. The image can be saved in either RAW or IFF – (the palette saved separately) thus easing the task of incorporating them in binary files – er, games. These features will also be appreciated by serious programmers who might want to convert images for use in their Intuition interfaces.

For less serious use, *Pixmate* can provide hours of entertainment. False colouring will be enjoyed by abstract artists experimenting with modern art – and just as much, it can decipher cloud formations over Great Britain. Every serious Amiga user *must* have this – of that there is no doubt.



In the world of games, sound quality has become almost as important as good graphics. More than ever before, gamers expect to receive an audible feast as well as a visual one—the simple fizzes, pops and bleeps of yesteryear no longer suffice. Even the complex audio hardware offered by the Amiga is only as good as the information it is supplied with.

By way of achieving the level of realism demanded, programmers have had to look at (and listen to) the real world. Recordings are made, sampled by sophisticated hardware, then edited and mixed down until sounds mimic the outside world.

Although the result is often nothing like the original, samples find their way into everything from musical scores to arcade games. They'll be giving them away with Cornflakes

next. A great example of Amiga sound sampling and manipulation is Aegis' critically-acclaimed *AudioMaster II* – now fortunately bundled with Omega Projects' highly-regarded Sound Trap 3 sampler by Lythambased Bytes & Pieces:

AUDIOMASTER II Aegis £59.95

The future of AudioMaster seems uncertain, given current rumours of the demise of Aegis Development. With the company's long string of excellent products, this would be a very great shame. AM2 was no exception, welcomed by sound freaks and revered by critics everywhere.

It comes on a single unprotected disk (trusting, these people) with a well written manual. And, unlike some sample editors, AM2 can work in mono or stereo, is compatible with both parallel and joyport hardware and works with the whole family of 68000 CPUs. The latter is important because the maximum sampling rate – and, therefore, overall quality – is affected by the speed of the CPU.

Also, like many of the products mentioned here, AM2 is so good it is difficult to do it full justice in a short resume. Merely listing its wealth of features would be enough to fill a page. For instance, AM2 has a VOX (voice operation) feature of the type often used by DJs. With this in operation sampling can be started as soon as a signal appears at the source. This is useful for recording short



Audiomaster II in action. A close zoom reveals a great deal of detail on this mono sample.



Getting everything ready to mix two waveforms together. The results can be unpredictable.



Zooming in closely on a section of a dual-channel mono sample.





This is a tool no serious artist or programmer can afford to be without. Somewhere within *Pixmate* there is a function to do just what is called for – you may never find it, even after consulting the manual, but it's fun trying!

For serious applications, *Pixmate* is a boon. In the image processing lab this is a tool which could rival systems costing thousands. It is not only cost effective, but also truly powerful.

As an example, *Pixmate* shows its sheer muscle by converting by 4096 colour DigiView masterpiece into an acceptable image directly portable to the ST in under 3 minutes. It can even take files from the ST too – in Neochrome format – although why anyone would want to is beyond



AMIGA CLUB

ATTENTION ALL AMIGA OWNERS

Join the Number One Amiga club today, and you can save hundreds of pounds off recommended retail prices. Our special offer this month. STOP! Every new member who joins we will send you "FREE" Pioneer Plague (Mandarin Software. RRP £14.95).

ONE YEARS MEMBERSHIP ONLY £7. THAT'S IT! NO COMMITMENTS LIKE OTHER CLUBS

Join now. We promise you will not be disappointed

Direct from West-Germany the N° 1 branded selling disk on the market 'Edixa' Top top quality, and every Edixa disk carries our lifetime warranty.

We can offer to all members these branded disks at unbeatable prices.

Price per box 10

3.5 inch DS/DD 1meg£6.99 £4.99

For every 10 boxes bought we give you one box free.

ACCESSORIE	S	
MARAUDER II (IN	MBERS RRP C. VAT	
The number one back-up program, already sold over 100,000	£14.99 £39.99	,
A500 512K RAM CARD + battery backed clock + On/off switch. Uses low power 1 Meg Dram	£49.99 £79.99)
The Rombo Vidi Amiga is a low cost, high performance video frame grabber system which will interface to any video source—camera, video-recorder etc	£99.95 £149.95	5
Vidi chrome is a powerful software package which utilises the Vidi-Amiga hardware to digitalise stunning FULL COLOUR pictures in seconds from a static video source	£24.95 £39.95	5

JOYS	STICKS	
	MEMBERS	RRP
Competition Pro Extra (autofire)	£12.99	£16.99
Competition Pro 5000 (black)	£9.99	£14.99
Konix Speed King	£7.45	£9.99 £8.99
Chectair 125 ·		

SPECIAL OFFERS

GRAPHICS STARTER PACK

4 Fantastic graphics packs, ideal for beginners at a price you just can't refuse:

AEGIS ANIMATOR:

The classic animation software programme that gives you the ability to control both the colour and the speed of the animation.

AEGIS IMAGES:

Similar to Deluxe Paint. A great start for the person wanting to get into paints programme.

AEGIS DRAW:

A computer aided design programme for creating scaled drawings.

AEGIS ARTPACK:

This programme is for use with Animater and Images. Essential pictures for people that can't draw. All this as one special offer for all club members. R.R.P. £99.00

OUR MEMBERS PRICE: £29.99

EXCELLENCE

From the makers of Scribble and Platinum the very best word processor that sets new standards for ord processing. Features you once thought to be luxuries you can now consider basics EXCELLENCE has all the powerful features in a package sophisticated enough that you can even use it in Desktop Publishing. These are just some of the features that this program has

- 100% Postscript support
- Over 70,000 words Theasaurus Over 90,000 words dictionary
- Free technical support for registered users
- Interactive grammar checker
- *Mail Merge

- ★ Mix picture with text in paragraph★ Multiple headers and foot notes
- ★ Not copy protected can be installed on hard drive

 ★ Up to 120 fonts in a single document

 ★ WYSIWYG editing

EXCELLENCE — the perfect word processor for every need. From letters to newsletters, from the annual report to the scientific research article, from the book report to the book itself.

IF YOUR WRITING ASPIRES TO EXCELLENCE YOU NEED A PROGRAM TO MATCH R.R.P. £199.95

Name

Signature

Address

Postcode

SPECIAL MEMBERS PRICE £119.95 (inc VAT)

TOPAMIGA GAMES all prices include VAT rrp 29.95 29.95 24.95 39.99 rrp 34.99 34.99 Kings Quest 1, 2, 3, 688 attack sub 16.95 Balance of Power 1990 Battle Chess Bomber Kings Quest 4. Leisure Suit Larry 2. Leisure Suit Larry 3. 20.95 34.99 34.99 18.95 16.49 18.45 15.95 24.99 29.99 24.99 29.95 29.95 17.99 Budokan Chase HQ Chess Player 2150 39.99 Ninja Warriors Police Quest 2 Pro Tennis Tour 19.99 24.99 24.99 24.99 39.99 Cyberball Collossus Chess X Die Hard Double Dragon 2 15.95 15.45 24.95 Drakkhen F16 Combat Pilot F29 Retaliator F16 Falcon Space Quest 2 Space Quest 3 15.95 19.99 34 95 Starflight 2 Test Drive 2 15.95 17.95 24.99 24.99 15.95 Flight Simulator 2 Thunderstrike Triad Comp Vol 3 Turbo Outrun 29.99 24.95 29.95 24.95 15.95 24 95 24.99 29.99 24.99 24.95 15.99 17.45 18.95 Ultima 5 Untouchables Warhead 16.95 15.95 Windwalker Kick Off 2 + MANY, MANY MORE!

PRICE BUSTERS Starglider 5.99 Hellfire Attack. Action Fighter6.99 Star Wars Trilogy9.95 Lombard RAC Rally 9.95 B.C. Football Fortunes 6.95 Technocop Mindbreaker4.99 Mr Heli N. Mansel Grand Prix Terrorpods. 7 99 Bangkok Knights 8 99 5 40 8.95 Purple Saturn Day 6.49 Quartz 5.95 Return of the Jedi 4.99 Tracksuit Manager 9.95 Chronoquest II Time and Magic 6.45 Dragon Spirit Rocket Attack 6.99 First Contact 6.99 Virus Weird Dreams Savage5.95 Shoot em-up Cons Kit ... 10.99 8 99 Global Commander7.99 4 95 Wicked

DELIVERY CHARGES Software EEC £2.00

UK £1.00 Service hardware: UK £5.00 EEC £10.00 Normal delivery 1-4 working days.

All prices and supplies subject to change without notification. Trading division of Nortek Computers Ltd.





Send to: Number One Amiga Club, Trafalgar House, Grenville Place, Mill Hill, NW7 3SA

QUANTITY	DESCRIPTION	PRICE
	DELIVERY	
	MEMBERSHIP	
CU2	TOTAL	
l enclose chequ	ue/PO for £	inc V
or charge my A	ccess/Visa No:	4
Exp. Date		V

Tel. No

Dowling

MAIL ORDER DIVISION COMPUTERS Tel: 0767 681760 (Fax: 0767 681730)

HEAD OFFICE:

Unit 48 Tyne Road

Sandy, Beds, SG19 1RB

Tel: 0767 681760 (8 lines)

ALL PRICES INC VAT PLUS A FULL 1 YEAR GUARANTEE

AMIGA DEALS

STANDARD PACK:- Amiga 500 computer, Mouse, Modulator, Power Supply, Operating Manuals & Disks etc

ONLY £339.95

ULTIMATE GAMES PACK

Amiga Computer as

in Standard Pack *

Rainbow Islands ★
Batman The Movie ★

★ New Zealand Story

Escape from the planet

★ Deluxe Paint II ★

F29 Retaliator *

F18 Interceptor

TENSTAR GAMES PACK - ONLY AVAILABLE WHEN PURCHASING AN AMIGA

★TEN STAR★ COMPRISING ★ Ikari Warriors ★ Buggy Boy

ALL TEN GAMES FOR JUST

£24.95

★Wizball ★ Terrorpods ★Barbarian ★ Thundercats ★ Art of Chess ★ Amegas ★ anity Flight * Mercenary

BATMAN PACK +	FLIGHT OF FANTASY	

- * Amiga Computer as in Standard Pack
- * Batman The Movie ★ F18 Interceptor
- * New Zealand Story
- ★ Deluxe Paint II ★ Tenstar Games Pack
- * Amiga computer as in Standard Pack ★ F29 Retaliator
- * Rainbow Islands * Escape from the Planet of the Robot
- Monster ★ Deluxe Paint II ★ Tenstar Games
 - of the Robot Monster Pack ★ Tenstar Games Pack ★ Megablaster Joystick ★ High Quality Dust Cover * High quality mouse

ONLY £369.95

ONLY £369.95

ONLY £399.95

OUR PRICE

£429,95

OUR PRICE

£429,95

NEW PROFESSIONAL BUSINESS PACK

- ★ Amiga 500 computer as in standard pack
- ★ Kindwords II wordprocessor (RRP £49.95) ★ Superbase Personal II, Database (RRP £99.95)
- Maxiplan Spreadsheet (RRP £99.95)
- ★ Box of ten MF2DD branded disks (RRP £12.99) This pack usually sells for over £660

NEW PROFESSIONAL ART & MUSIC PACK

- ★ Amiga 500 computer as in standard pack
- Music X software package (RRP £229.95)
- ★ Photon Paint II latest version (RRP £79.95) This pack usually sells for over £700

NB: Music X is the full blown UK version, do not confuse with inferior versions or "Music X Junior"



Being Star registered dealers we only sell official UK machines which come with a full 1 year guarantee. Beware of inferior imported products

		p. c. c. c. c.
OFFICIAL U.K VERSIONS	RRP	OUR PRICE
STAR LC10 mono 144/36 C.P.S STAR LC10 II 25% faster version STAR LC10 Colour, 7 colours STAR LC24-10- 24 pin multifont STAR LC10 Sheet Feeder (auto) STAR LC10 Mono Ribbons STAR LC10 Colour Ribbons STAR LC24-10 Ribbons STAR LC24-10 Quality Dust Cover	£229.95 £263.35 £297.85 £343.85 £74.75 £5.95 £7.95 £7.95 £7.95	£149.95 £169.95 £189.95 £229.95 £3.95 £3.95 £5.95 £5.95

VIDI-AMIGA SCOOP

At last a complete system enabling you to connect your Amiga computer to any standard video recorder and start frame grabbing! Features include: -

- PERFECT FREEZE FRAME FROM ANY VIDEO
- UTILITY TO INCORPORATE REAL LIFE OBJECTS INTO YOUR
- FAVOURITE DESIGN DYNAMIC CUT AND PASTE
- ★ ABILITY TO TAKE SNAPSHOTS IN 16 SHADES LIVE FROM VIDEO
 ★ MULTIPLE FRAME STORE
- PLUS LOTS, LOTS MORE!!!

WHAT YOU GET

VIDI AMIGA (PAL VERSION)

Hardware interface plus software..

Upgrade kit enabling you to digitise stunning full colour pictures

High quality video tape to get you going!.....

rrn £19.95 in seconds E180 VHS/BETA

ALL THIS FOR THE INCREDIBLE PRICE OF £109.95

AMIGA 1010

Original Commodore External 3.5" disk drive Features Robust design Through port Official Commodore drive

RRP £149.99 OUR PRICE

£59.95

- Real Time clock with NICAD battery backup
- Monthly disable switch to revert back to original 512K
- 12 months guarantee. Full tested prior to despatch

AMIGA A500

Only top quality components used THE MEGABOARD RAM EXPANSION 500

Up-grades your Amiga 500 from 512K to 1 Megabyte

> ONLY £44.95

* 3 1/2" DS/DD BLANK * DISK SCOOP

All our disks are of the highest quality, are 100% certified and individually wrapped. We guarantee each disk is either Sony, TDK or Verbatim unbranded.

Box of 50.....£19.99 Box of 100.....£37.99

Roll of 1000 Disk Labels £5.99 (only available when ordered with disks)

PERIPHERALS, ACCESSORIES AND **SERIOUS SOFTWARE**

FOR THE MORE DISCERNING COMPUTER USER	RRP	OUR
Commodore 1084S Stereo Monitor Cumana 1 meg Quality Drive - The best High Quality Amiga Dust Cover High Quality 1084S Dust Cover Replacement Amiga Power Supply Kindwords 2 wordprocessor Superbase Personal 2 Maxiplan Spreadsheet Photon Paint 2 - Latest Version Deluxe Paint 2 - Excellent Value Aegis Sonix version 2	£299.95 £89.99 £9.95 £12.95 £49.95 £49.95 £99.95 £79.95 £49.95 £69.99	£249.95 £69.99 £5.95 £6.95 £39.95 £29.95 £29.95 £29.95 £29.95 £29.95 £29.95

ORDERING MADE EASY



Order by phone by calling our Head Office quoting your Access/Visa Number



Order by Post - make Cheques, Building Society Drafts or Postal Orders payable to Dowling Computers

Add £6.00 courier delivery for all orders over £100.00 (UK mainland only). Add £2 for orders under £100.00

duration single events: cymbal clashes, sneezes, gunshots and the like. This can be disabled, of course, and sampling triggered by the mouse.

Another problem with digital sampling is bias. Many samplers add their own signal to the baseline causing the sample to start and finish off zero. This is a problem especially for musicians because it can result in a click or pop at the start and end of the sample. AM2 can be asked to correct for this bias, either manually, or automatically if the manual bias limit is exceeded.

As far as editing is concerned, there is little imaginable that AM2 cannot do. Any part of the signal can be swapped, cut, chopped and remixed with other parts in a variety of different ways. Special effects like echos, fades and stereo pans are a doddle to achieve too.

All this is perfectly possible with mono samplers because each channel can be sampled in turn. Conceivably the two stereo signals could be mixed and added to two more, giving a chorusing effect.

Considering the speed and sheer ease of use of AM2, the competition will have to come up with something very clever to beat it. It could be bettered by a 12-bit or 16-bit sampler but that would not be compatible with the existing 8SVX IFF standard.

AM2 saves and loads either RAW or 8SVX. So it should be compatible with all other Amiga sound software – such as Sonix, Soundtracker and the numerous PD sample players. Of course, it can be used on its own to produce totally new samples or edit existing ones from other systems. But to get the best out of it, it should be coupled to some hardware – and Sound Trap is pretty tough to beat at £59.95 for the special bundle from Bytes & Pieces.

SOUND TRAP 3 Omega Projects £37.50

Claimed to be the first sampler on the market to offer a printer through-port suitable for all Amigas, with a gain control and on/off switch, all in a casing scarcely larger than a box of Swan matches! Unlike many claims, this one is accurate – and the equipment boasts remarkable quality too.

The ultimate polish of any sound sample relies on many things. The software is important for editing and final adjustments – but if the hardware is poor, the quality will inevitably suffer. As ST3 proves, size is not important and good things do come in small packages.

The unit is based around a recent VLSI 8-bit stereo sampling chip, although in its present form ST3 only allows for mono samples with rates approaching an impressive 40Khz.

Considering the adult human's audible bandwidth is, realistically, only around 20Hz-15Khz (young children manage as high as 20Khz) this is quite sufficient. Overkill it is not, since the minimum sampling rate must be at least twice, preferably three times, the maximum frequency of the sound or distortion will set in.

ST3 only suffers one problem, which is endemic to Amiga 500s, not to the sampling unit. Like many parallel samplers, it draws its supply from the Amiga. Even though Commodore claim supply currents as high as 500mA at 5V, some 500s suffer a voltage drop at low currents and can't power certain chips.

Now this problem has been identified, all ST3s are tested before release and the borderline chips replaced. At the planning stage is a kit version of ST3 with an external power source, eliminating the flaw. The ST3 with trimming tool (screwdriver), lead and manual is a steal.



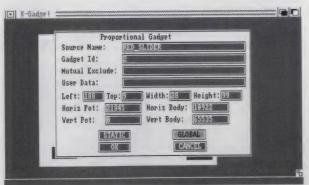
Writing an Intuition-based application is a complex, time-consuming and tedious business at the best of times. However the design of the user interface can make the difference between an excellent program and a mediocre one.

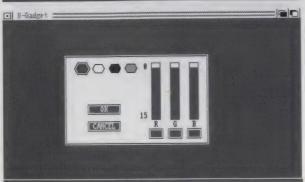
Time after time, reviewers comment on the poor use of Intuition which subtracts from the otherwise

BELOW, TOP: Editing the settings for a proportional gadget with K-Gadget.

BELOW, RIGHT: And here it is in full!

BOTTOM: This is the the supplied example.







excellent package that confronts them. It is vital to all users – from the neophytes to the experts – that communications between them and the software should be obvious and simple; no matter what the intricacies of the the actual system might be.

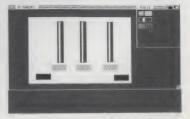
This first line of defence is also one which programmers find most difficulty with. Designing the display is a task in itself, without wrestling with integrating the user's interactions with the program. Even though Intuition (as Commodore are keen to point out) does a lot of the hard work, the fiddling details are still left to the programmer. If they were not, applications would lack individual character.

Once again, the utilities come to rescue in the shape of two packages, one aimed at the low end of the market, the other at the high end. Both have the same goal in mind: remove the need for programmers to worry about designing interface code.

These utilities allow programmers to experiment and test all the gadgets, windows, requesters and so on afforded by Intuition as they might be used in the application without the bother of having to write the code. When the programmer is completely satisfied with the set-up, the program generates the source code necessary for Intuition. It should be made clear though: these programs do not provide the drivers to interface to the code, just the tedious structures required by Intuition – a chore which should not be underestimated.

K-GADGET Kuma £29.95

At the price, K-Gadget is squarely aimed at the low-cost end of the market, but that should not be taken as meaning that it is deficient in power. It merely lacks the frills of its pricier competitor, *Power Windows*. The package is supplied on one unprotected disk with a 70-page, ringbound manual. Like many Kuma



products, although the documentation may look low-cost a lot of thought has been put into its authoring and design. The largely tutorial-based text



is well punctuated with diagrams, guiding new users through every stage of producing a simple palette requester. The complete source and binary for this is also supplied by way of demonstration.

The main screen of K-Gadget consists of two windows. A design window where the gadgets are constructed, and a parts window where the gadgets live. In its current version, K-Gadget only supports Requesters containing: Boolean, Proportional and String gadgets. No support is offered for the construction of Windows or Screens; these are straightforward enough to code manually for the type of simple applications K-Gadget is meant for.

Constructing a new gadget is easy. First drag a new requester from the parts box and use the "handles" supplied to make it about the right size - fine adjustment is possible later. Next simply drag the required gadgets onto the Requester area, position and size them as before. Text and the attributes required for each application can be set from the program before the final source is generated. For fine-tuning of control design etc K-Gadget incorporates its own (simple) image editor.

Of the two source-code generators mentioned here, K-Gadget is the simplest to get to grips with. Its main limitation is its inability to produce source code in anything but C. However, since C is by far the most popular language for producing Intuition applications this should not pose a major problem.

Also, the lack of a "test" facility is a nuisance. Intuition experts and programmers producing very large applications are advised to consider the more expensive Power Windows. Anyone experimenting occasionally with the system - especially beginners, thanks mainly to the manual will find it easy to use and powerful enough for many situations.

POWER WINDOWS 2.5 Inovatronics £69.95

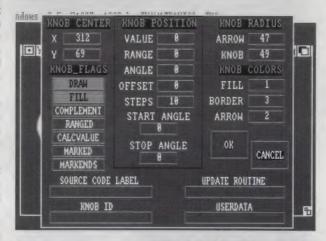
Represents the other end of the source-code generator spectrum. The good news is: for the price, the package offers a quite bewildering host of features - there really is nothing to touch it. Unlike K-Gadget, it produces source suitable for almost every language or compiler imaginable: C, True Basic, TDI Modula 2 and

designing engine.

It is so packed with features it impossible to do it any real justice in a concise critique like this - we can only attempt to pick out a few of its more unique points. Perhaps it would be best to say if Power Windows can't do it, it probably can't be done.

68000 assembler to name a few. Now for the not-so-good news. Be under no illusions, Power Windows is meant for serious programmers only - something the manual states quite categorically. To this end, the all-too-brief 28 page manual concerns itself less with protracted tutorials on Intuition and more with the heavy metal driving this excellent WIMP-

pWindows v2.5c @1987, 1988 by INOVATRONICS, INC ■ Уока пен напариш



RIGHT: Creating windows is a cinch in Power Windows.

TOP: This selection in

Power Windows

"clock" knobs.

includes those new

MIDDLE: Editing the

attributes for a knob...

BELOW: A new screen, with a window. Those images are gadgets too, believe it or not!



Unlike its low-cost British competitor, every gadget works exactly as if it was in the application. It is also possible to create, edit and manipulate both Screens and Windows. As if that were not enough, an option is provided to "steal" screens and the like from other software!

In search of perfection. Inovatronics have gone further than merely producing a tool which can create interactive Intuition environments: they have produced extra gadgets Intuition designers left out. These include a completely new kind of proportional gadget resembling the circular control knob favoured by hi-fi freaks and a new pop-up menu.

There is bad news though; in order to do anything useful with these requires the purchase of Inovatools1, retailing at about the same price. Putting the proverbial carrot before the donkey as it were, these new gadgets can be tested within the program - and very nice they look.

There is little to fault in Power Windows. If any objection has to be raised, it would be that it could do better to welcome those new to Intuition - rather than fobbing them off. Also the lack of an image editor is something where K-Gadget scores even though IFF files can be imported, a limited editor would have been nice.

Power Windows is probably the best Intuition design tool around. However, limiting accessibility to those learning their way around Intuition is something which should be remedied. Nevertheless, experienced users should never be seen programming without it.



If utilities are the cement in the software house, editors must surely be the water in the mortar. A good editor is vital to a programmer. It is here the vital prose of code flows from the programmer's mind into the mind of the computer, stopping briefly at the compiler's house on the way.

But almost without exception, every interpreter, compiler or assembler is supplied with some editing facility; ranging from the simplistic to the sublime. Which begs this question: why do some programmers spend long hours developing more - surely this is a case of re-inventing the wheel?

The answer is, more or less, philosophical. The wheel is a finite design of infinite complexity. But why

Greater London Computers

Hardware	
AMIGA 500 BATMAN PACK	£379.95
AMIGA 500 Flights of Fantasy Pack	£379.95
AMIGA 500 Class of the 90's Pack	£549.95

Monitors: A1084S Stereo Colour Monitor

£249.95 £249 95 Phillips CM8833 Colour Monitor Phillips BM7502 (Amber) £92.95

Disk Drives:

A1011 External 3.5" Disk Drive £99.95 A590 20Mb Hard Disk £379.95 RAM Chips for A590 per half Megabyte £34.95

Printers:

MPS 1230 Printer £199.95 Mail Order: MPS 1550 Colour Printer £239.95 £179.95 Star LC-10 Colour £219.95 Star LC-24/10 £249.95

Others:

A501 memory upgrade £89.95 A1352 Mouse £34.95 Mini Gen Genlock £129.95 Quickshot Turbo Joystick £9.95 Navigator Joystick £14.95

Software:

Deluxe Paint III, Deluxe Video III, Publishers Choice, Pagesetter II in stock. Plus lots of Games, ring for details.

> AMIGA 3000 Now Available

Orders and information from our Sales Line: 081-527-0405

481 Hale End Road. Highams Park, Chingford. London. **E49PT**

Tel: 081-527-0405 Fax: 081-503-2341

Delivery:
All orders include free delivery. Orders over £400 include free delivery by DATAPOST.

All computers come with a correctly fused plug fitted.

Orders can be made by Telephone, Fax or Post. Credit card orders are checked and despatched at once. Cheques are cleared and goods despatched upon clearance.

Other items:

Greater London Computers also stock the Amstrad PC range, Atari ST and several other systems plus printers by Epson, Star, Brother etc. We also keep a wide range of Printer ribbons and blank discs in stock at very competitive rates. Please call for details:

Special Offer

DigiView Gold V4.0 & Camera & Stand & Lights only £405.95





MAKE YOUR

AMIGA



EARN!

Yes making money with your Amiga becomes incidental when you know how. Your micro is, if only you knew it, a gold mine. The size and make is irrelevant. Make the initial effort NOW by starting your own

HOME BASED BUSINESS

This may be the most important move you will ever make!

REMEMBER: You'll never get rich by digging someone else's "ditch". Anyone in the country, including YOU, can become very rich in a relatively short period of time just by doing a few basic things! It's more rewarding than playing games. The benefits are many and varied. Full or part time. For FREE details send S.A.E. to:



HOME BASED BUSINESS

> 31, PILTON PLACE (AF 14) KING AND QUEEN STREET. WALWORTH, LONDON SE17 1DR



USE YOUR VOICE TO OUTDRAW THE GUNFIGH

INFODIAL POBox 36 LST 4TN Call charges 25p Per Min Cheap 38p Per Min All Other Times

COURSEMASTER The Computer Horseracing Program

- RATES ANY RACE IN SECONDS ANY DAILY NEWSPAPER IS ALL YOU NEED

 NEVER Out of date Both N. Hunt & Flat Fast Data Entry

 AMAZING ACCURACYI Now you CAN BEAT THE BOOKIE!

 Volvis on the simple principle that FAST HORSES BEAT SLOW ONES!

 Clearly identifies best selection in every race plus these AMAZING features:

 First, Second and Third choice shown for Forecasts & Tircasts, etc.

 Recommends most suitable type of bet.

 Actually works out your WINNININGS on most popular bets including SINGLES

 & DOUBLES, win and each way. PATENTS, YANKEES, CANADIANS, HEINZ etc.

 GOOD EACH WAY and LONG ODDS bets clearly shown.

 WIII PRINT OUT your BETTING SUP for you.

 Maintains a BANK ACCOUNT BET like PROFESSIONALS do! Records all your bets in any number of accounts. Keep a complete record of your betting or compare COURSEMASTER SYSTEM. This superb betting system is included in the program. A system which regularly produces huge wins
- is included in the program. A system which regularly produces huge wins from small stakes. Try it! It can pay for itself many times over on the first day! supplied with 20 Page BETTING GUIDE and MANUAL.

FREE HOT TIP OF THE MONTH TO EVERY PURCHASER @ £17.95 tapes, £19.95 discs, inc P&P + VAT

PERM-MASTER

If you are one of those pools punters who regularly uses the perm plans for entering your weekly coupon, (as we at Intraset recommend). Then it is ofter difficult to assess whether or not you have actually won. PERM-MASTER puts are not to that. With it you simply enter the number of points obtained for each of your selections, and PERM-MASTER does the rest. The program is supplied already with some of the top plans built in, but if your favourite is not there, ther you can simply create your own, using the unique perm editor.

• FAST and SIMPLE to use.

• UNIQUE PERM EDITOR allows you to add plans not supplied (Simply edit the X's • For most BLOCK PERMS and SINGLE LINE plans. (Up to 95 selections)

Available as for POOLSMASTER @ £17.95 inc P&P + VAT

£ PROFIT FROM YOUR MICRO

- WHATEVER your MICRO is you can use it to make a good income!
 Even if you only have a couple of hours to spare each week.
 We have put together a package of easy, sensible and practical business ideas which can easily be used by anyone with any micro.
 No computer expertise required!
 Eam EEP's from home doing what you enjoy doing using your COMPUTER!! It dosent matter which mode!
 You probably already have all you need to start earning.
 HOUSANDS of potential customers in your area who will GLADLY pay for your services. We will show you how to find them!
 Full step by step guide to EARNING MONEY FROM YOUR MICRO. FREE BUSINESS IDEAS CASSETTE TAPE WITH EVERY COPY

£12.95 inclusive

ogs available for all PCW's, all IBM PC's + compatibles, Amstrad PC's, Atari + Amiga + CPC 6198 ursemaster + Poolsmaster also available for Spectrums, Commodore 64+198, CPC 464+664

POOLSMASTER

the amazing POOLSMASTER program is by far the best Pools Predictor we have ver seen. In just 10 weeks of trying this program ourselves, we won no less than 2 dividends, the largest being nearly £300. Mr F. C. Hammond from Essex won analy £10,000 bin just 16 weeks. In his own words "life a licence to print money." OOLSMASTER is simple to use and requires only that you keep the league tables to date using your usual newspaper. He result of many years research into the Football Pools by the programmer Martin vans of C.C.S., the program is a materpiece of expertise, and is simplicity itself to se

- Predicts homes, Aways and Draws

 No fiddly typing in of teams names etc and no redundant databases.

 Instant read-out or Hardcopy if you have a printer.

 Uses scientific formula based on recent form home and away, league position, goals scored etc. It has long been realised that certain combinations of these factors return a much higher than average of draws than the laws of average would expect. POOLSMASTER looks for these factors and analyses their significance to give you the best possible chance of a win.

 Also has a "Sequence Predictor option. Many people believe that certain numbers not site to cup on come up more often than others, and over a sesson patterns do seem to develop. The program analyses these patterns and predicts the numbers most likely to come up ned. Certainly more scientific than sticking a pin in, or family brithdays etc.

If you do the POOLS then this is the program for you. @ £17.95 tapes, £19.95 discs, inc P&P & VAT

+++SPECIAL OFFER+++

SPECIAL COMPENDIUM DISKS: Please state British or Australian version CONTAINING BOTH POOLSMASTER AND PERM-MASTER - 6:36.95 CONTAINING POOLS, PERM and COURSEAMASTER - 6:49.95 BUY ANY THREE DISKS (OR TWO INCL COMPENDIUM) AND RECEIVE PROFIT FROM YOUR MICRO ABSOLUTELY FREE

THE GRAPHOLOGIST

@ £49.95 inc P&P + VAT

Master your own finances. There is now no need to be frightened by accountancy software. CASHMASTER provides you with the easiest method yet invented to keep track of all your finances. Be you a business or professional individual, you are sure to need to know where your money is going CASHMASTER will allow you to input all the necessary information per transaction in one simple operation, whilst allowing you to extract the absolute maximum from it all again with an array of statements and reports.

Features VAT analysis

Easy, natural data entry - Just like a handwritten ledger

Any, amount of ledger files

Ledgers can span any time period, there is no one year limit

Reports can be produced over any time span (1 day to 100 years)

90/09 Class Codes (User definable) per ledger file

30/09 Accounts per ledger file

Detailed statements showing balances (Selected accounts & classes)

Profit & Loss Statements (Selected accounts & class totals)

Tagging of entries for extra report selectivity

VAT element automatically calculated and displayed

Pop up running total calculator

Entries can repeated with just one key press (Standing Orders etc.) Weekly, Footnightly, Monthly, Quarterly, Half Yearly or Yearly

Entries can be edited or deleted at any time

Insert enteres anywhere, CASHMASTER puts them in chronological order for you.

- Reports directable to Screen. Printer or Disk file.

- Reports directable to Screen, Printer or Disk file
 Detailed selectivity for reports
 Reference field for each renty (Invoice No, Desp Note No etc)
 10,000 entires RC version, 9,200 PCWS
 No need for sorts, always in correct order
 All functions and operations available from main program screen
 Most functions operate from a single key press
 Scan through the ledger a line, or page at a time if required
 Split and merge file
 Class and Account code descriptions visible at all times. Scroll through pages.
 REE spearate running total calculator for adding up those cheques, useful for those quick sums

WE APOLOGISE TO ALL OTHER SOFTWARE WRITERS AND TO ANYONE ELSI WHO HAS BOUGHT THE OTHER SO CALLED "EASY TO USE" PROGRAMS CASHMASTER REALLY DOES BLOW THE LID OFF COMPUTERISED ACCOUNTING

THIS IS HOW IT SHOULD BE DONE

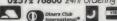
Not only superior to the competition, it's far cheaper too! @ £29.95 inc P&P + VAT



INTRASET LTD, (DEPT AF)

FREEPOST No 10 WOODSIDE AVENUE, CLAYTON-LE-WOODS, CHORLEY, LANCASHIRE PR6 7QF Tel: 0490 3284 9am - 6pm

02572 76800 24hr ordering









not improve it by adding pneumatic tyres? Must it have spokes? How many spokes should it have? And who's to say what colour it should be?

Commercial editors have not been covered here – there are simply too many of them. For a change here's a critical look at the ones supplied free with the system.

ED Commodore Free

Almost everyone who has done anything with an Amiga has used ED. It is one of the two editors supplied with the early Amigas and, for most people, easiest to use. Workbench

Thanks to the following for their kind support:

Bytes & Pieces 0253-734218 (AudioMaster II and Sound Trap)

HB Marketing: 0753-686000 (Power Windows and Pixmate)

Kuma Computers: 0734-844335 (K-Gadget) Intuition menu interface – unlike ED there is no Intuition window either. EDIT communicates everything with the console. This may seem a little out-dated and out of context but it can be surprisingly useful.

Edit does not read the entire file at once and therefore can deal with extremely large amounts of source. This also has the added advantage that binary physically included in the file will remain unaffected by actions performed in Edit.

The best feature, though, is that *Edit* can be used remotely over a serial link to another machine – say another Amiga, a PC and ST or even (in theory at least) down the phone to a Z88! Total masochists could use this technique to write, assemble and test code over the phone. If the Amiga were to Guru ROM wack would take over at 9600 baud – possible with a fast modem...

MEMACS Commodore Free

An Amiga-ised version of David Conroy's public domain text editor *micro-Emacs* (sometimes written with a greek mu – $\mu Emacs$). Like *ED*, *Memacs* is a powerful full-screen editor but has the added advantage of menus. It comes on the Extras disk with Workbench 1.3.

By default, *Memacs* is unusual because it runs in a custom screen, although it can be configured to run in a Workbench window. More unusual still, in an otherwise feature-packed editor, line wrapping is not supported.

Lines exceeding the 80 character maximum width are truncated at the edge of the screen and marked with a \$. The extra characters are not lost, rather hidden from view. This does not apply to either ED or Edit.

Another advantage of *Memacs* over *ED* is that it's a multi-file editor – more than one source file can be viewed and edited at once and text swapped between them. All this power comes at a cost though – size. At over 62K, it's three times the size of either of the two standard Workbench editors.

Conclusions

At the end of the day, no tool, no matter how good it may be, is going to make anyone into a programmer who doesn't already have a natural bent in that direction or the necessary skills. All they can do is help make good software better by enabling existing programmers to exploit their abilities to the full.

Pundits might suggest, at this point, that with computers ever increasing in power, the role of the programmer is rapidly decreasing and very soon computers will actually be programming themselves. It is one possible future.

But for this author, at least, that is a somewhat fatuous remark. No computer, no matter how powerful it may be, will — in the foreseeable future — ever mimic either the human imagination or capacity for creative thinking. Until then, the role of programmers, and the tools they use, will slowly become more integrated in society than ever before.

users frequently experience culture shock when they first use *ED* because it is very beginner-unfriendly. Even getting into *ED* itself can be a chore, because it takes a filename as a required argument.

Once inside there are no menus, no close box — nothing. Every command — aside from simple movement — sent to ED is performed through a series of bewilderingly complex commands. It is even necessary to press escape (ESC) to put ED into command mode.

The reason for this is probably space. Intuition structures take up a lot of room in a program and space is at a premium on a standard Workbench disk. Though ED is not suitable for very large files it is powerful once the command set is learnt.

EDIT Commodore Free

Almost like a scaled down version of ED. It is a line editor of the type most often encountered on MS-DOS machines. Like ED, Edit has no

ABOVE: Editing a startup script in MicroEmacs.

HARD AND SOFT OPTIONS

Games programmers always program the hardware and applications programmers always program through the operating system. Why? The reason is simple – games programmers need the speed, and sometimes the special effects, that is only possible by addressing the hardware directly.

Recently the case for "hitting the metal" has been weakened to some degree by Readysoft who have produced Escape From Singe's Castle, the follow-up to their hugely successful Dragon's Lair, in a way that can coexist quite happily with the multi-tasking environment. This has raised eyebrows in some corners and shouts of "We told you so" from Commodore.

It should be said, though, that while Readysoft have skilfully avoided techniques requiring the hardware approach, not all games can be written this way. No doubt the arguments for and against shall continue long into the night.

Where 'serious' applications are involved there is no real option but use the operating system routines provided by Commodore – even though some, the graphics library in particular, are tediously slow. The advantage of operating system usageCommodore caused some concern amongst developers recently when they announced Workbench 2.0 with its new version of Intuition and scalable fonts. "For the first time, users will be able to decide the screen font and window fonts." they said. All fine and nice in a perfect world: but hundreds of applications already use the default font and expect to find Topaz 80 or something similar. If users start altering things willynilly, as Commodore intend, hundreds of applications will cease to work correctly! This will show itself as alert boxes and requesters suddenly refuse to work properly, if at all. Ahem...

Get real! Get wicked! Come and zap it to us at the ultimate computer gameshow!

XPERIENCE the greatest gameshow in the universe. The European Computer Entertainment Show is the only show dedicated to the latest in games software and hardware from the leading brand names. Enjoy the live entertainment. Meet your favourite celebrities. Maybe

even appear on TV. Try out the newest games and equipment from some of the biggest names in the industry including Commodore, Sega, Nintendo, US Gold, Ocean, Domark, Mirrorsoft, Microprose, Activision, Virgin/Mastertronic, Accolade and Gremlin.



WHAT'S HAPPENING

- Stands and exhibits by leading names in computer games
- Live music acts
- Personality appearances
- Live TV and radio broadcasts
- International computer game championships featuring teams from Europe, Japan and America
- Celebrity computer challenge
- Spot prizes and raffles
- Living-room of the future
- C&VG national computer game championships.

It's a great day out for all the family.

IOAM - 6PM
EARLS COURT
I5th AND I6th
SEPTEMBER

A portion of the entrance fee will be donated to

ChildLine

16 BIT CENTRE

ALL PRICES INCLUDE VAT AND COURIER SERVICE

CALLERS AND MAIL ORDER WELCOME

OPEN MONDAY to SATURDAY 9am-6pm

PHILIPS 8833 STEREO MONITOR

Including Lead for Amiga
ONLY £239.00

STAR LC-10 COLOUR PRINTER

Including Free Printer Lead
ONLY £199.00

STAR LC-10 MONO PRINTER

Including Free Printer Lead

ONLY £159.00

NAKSHA

Upgrade Mouse for all Amigas. Includes Mouse Mat plus holder.

ONLY £28.50

A500 XMAS PACK

STILL AVAILABLE

Includes: A500, Mouse, Modulator, Leads, Workbench, Basic, Tutorial, Joystick, Mouse Mat, Disk Bank, 10 Blank Disks, Amiga Dust Cover, F-29 Retaliator, Rainbow Islands, Escape Robot Monsters, Deluxe Paint II, Pioneer Plague, Star Wars, Empire Strikes Back, Return of the Jedi, Bubble Ghost, Warlocks Quest, Chamonix Challenge, Passengers on the Wind 1 & 2, Foundations Waste.

ONLY £399.00

The games may change depending on availability.

HARDWARE

COMMODORE A590, 20Mb Hard Disk, Unpopulated	£369.00
COMMODORE A590, 20Mb Hard Disk, Populated to 2Meg	£469.00
COMMODORE official A501 Ram expansion	£79.00
COMMODORE 1084 P monitor	£239.00
PHILIPS AV7300 TV TUNER	£69.00
PHILIPS 8833 Stereo Monitor inc Lead for Amiga	£239.00
TARGET Sound Sampler plus software	
SOPHUS S5 Professional Stereo Sound Sampler	£99.00
NAKSHA Mouse	£28.50
TARGET Midi Interface, In, Through, 3 x out, LED's	£29.00
CAMERON A4 Flat Bed Scanner, software & interface	£499.00

PRINTERS

CT D C A A A A A A A A A	
STAR LC-10 MONO PRINTER	£159.00
STAR LC-10 COLOUR PRINTER	£199.00
CITIZEN SWIFT 24, 24 Pin Mono Printer, (Upgradeable to Colour	
CITIZEN SWIFT 24, 24 Pin Colour Printer	£329.00
CITIZEN 120D	£139.00
Panasonic KXP 11/24, 24 pin	£279.00
SWIFT 24 Colour upgrade	£35.00
Epson LQ400 24 Pin Printer	£249.00
All printers supplied with 1.8M cable.	

SOFTWARE AND DISKS

ARENA ACCOUNTS	£119.00
3M DS/DD Disks, Box of Ten inc. Labels	£12.95 i
COMICSETTER	£39.00 I
SUPERBASE PERSONAL	£39.00
K Spread II Spreadsheet	£39.00
FANTAVISION	£29.00
XCOPY V2.9, Copier + Text Editor (H/W V6.4 £29.00)	£19.95
PEN PAL	£110.00
AEGIS Sonix V2.0	£35.00
ESCAPE FROM THE PLANET OF THE ROBOT MONSTER	£9.99
DIGIVIEW V4	.£119.00 I

NEW LOW COST DISK DRIVE

□ SLIM DESIGN METAL CASE □ 880K FORMAT CAPACITY
□ ON/OFF SWITCH □ THROUGH PORT
□ HIGH QUALITY CITIZEN MECHANISM

ONLY £74.95

TARGET RAM EXPANSION

512K RAM EXPANSION FOR A500 USES 100NS Chips for true fast RAM

ONLY £59.00 (£49.00 Without Clock)

AMIGA PACKS

HOW TO ORDER:
Either call our number
below with your credit
card details, or send a
cheque/PO or credit
card number and
expiry date to our
address. Make cheques
payable to

THE 16 BIT CENTRE
Prices subject to change without
notification.

16 BIT CENTRE

Lancashire Fittings Science Village Claro Road, Harrogate HG1 4AF Warranty on hardware including Commodore.
Please note that all products that require repair under warranty will be repaired within 5 working days if customers have taken out our extended warranty plan. Please phone for further details



Tel (0423) 531822/526322



When we check out the list of new products and software to review in the music section, we consider several factors before getting down to the actual nitty gritty, to steal a phrase from our leaderine, of the review itself. These centre around what we figure could realistically be the average set-up of you, the reader. That's how come we run so many articles with helpful hints, cost-cutting exercises and what you should be looking for in music soft and hardware.

The price of the product is all-important. Our surveys show that while a merry few may have disposable income running into figures worthy of a Zurich bank account, the vast majority of you, and that includes me, have not.

Little point then that we should be discussing, say, the very latest sampler from Roland – the S770 – which, with all the add-on bits and bobs, comes in at a shade over £11,000. Yes I would love to get my hands on one, even if only to play with, but the reality is that it wouldn't serve any real practical purpose other than to make both you and I feel pretty second class with only a four-voice Paula chip for consolation.

Dizzy Heights

But is it a waste of time to look at these dizzy heights of technology and erstwhile status symbols? Occasionally, no. We all have to have a standard to measure by. While it might be depressing to see that your present music gear is well down in the status listings, it is interesting to see just how much of the current technology is already in your hands.

LET'S GO

Crazy!

Ever wondered what you would buy if money was no object? **JON BATES** runs through the musical gear of everyone's dreams.

In time, today's new state-of-the-art technology becomes the property of everyone, so a look at what is now unaffordable gives a good idea of the technological territory that lies over the horizon. What the megastar hires or buys today will be sat alongside your Amiga three years hence, albeit in an easy-to-use, cut-down version.

Lastly, although one hears of a large amount of equipment out on a permanent loan basis to the apparently rich and world famous it is also true that many of them fork out large amounts of capital for what is the first version of the instrument.

Manufacturers like to recoup the money sunk in developing the beast as quickly as possible and any bugs in operating systems are best got rid of before the likes of you and I get our mits on it. If we complain it will be in loudly and in public, not privately over drinks in the director's own penthouse suite.

MUSIC

Lights, Action, Sound

Here's a set-up to make you go as green as a stagnant canal. Hans Zimmer has worked on many a good film score, the last three films he worked on each got Academy Awards

SYNCLAVIER

The concept of having a quarter of a million pounds sunk in various bits of equipment pales completely into the distance when we come to

look at the American born and bred Synclavier, which can swallow nearly twice that fee up in one greedy go.

This mega-beast has been rolling on since 1977 and undergoes continuous updates. I first saw it demonstrated in France in the summer of 1980 and was suitably impressed. It is a digital synthesizer, sampler, sequencer and recording studio all rolled into one under the strict control of its own internal computer.

In all, about 700 Synclavier systems have been sold and the latest breed has RISC (Reduced

Instruction Set Computer) at its epicentre. This has a prodigious memory, and the ability to run 96 voices and keep 128 channels of MIDI data in check while it controls the 200 track sequencer. One nice touch is that to keep previous users happy the latest monitor screen.

shows a representation of the original control panel which used to be mounted on the keyboard. If you ordered one, say the top model



9600, it would arrive with a keyboard kitted with controls and a bank of several dozen lights, two cupboard-sized cabinets packed with the CPU, a qwerty keyboard and 19" Apple Macintosh II monitor station. The sound capabilities are quite awesome.

To complete this totally digital studio there is the direct to disk recording module called PostPro. This has an 80Mb system disk all to

itself and is capable of storing enormous amounts of sampled sound. In other words, to make your album all you need is this instrument. The results are recorded directly onto four 640 Meg hard disks with all effects etc that you can dream up. For real smarties, you could opt for 16 drives, which gives you a total of 32 hours of stereo recording straight to disk.

The cost, with all the bells and whistles, plus one year's warranty and training, is coming up for £399,250; which is roughly equivalent to seven

months' salary as British Airways chairman. But then, would you appreciate it all in one go?

If you have ordered one and this moral point worries you, then please redirect it to Amiga Format Music Editor, Future Publishing, Bath, Avon without delay.



for Best Picture. This give Hans a fair amount of clout when it comes to listing essential equipment to work on the next film, 'Days of Thunder'. His shopping list for this task was:

- 1 x Fairlight ("My favourite baby," quoth he)
- 3 x Roland Super Jupiters
- 2 x Yamaha TX816
- 8 x Akai \$1000 samplers each one expanded to 8 megabytes of RAM and connected to a read once/write-many-times optical drive.
- 1 x Oberheim Xpander
- 1 x Roland RD-1000 digital piano plus his old Emu system and a Roland modular system ("just for those serious bass noises")

BELOW: Part of Akai's range of professional music equipment, including various versions of the industry-standard \$1000 16-bit sampler.

MIDDLE: The S-1000 in keyboard form.

BOTTOM: The S-770 is the latest in Roland's range of professionalquality samplers. This uses Dynamic Allocation, which is a feature now on most multi-timbral modules. This is how it works. If you want two notes all the time for each of the eight separate voices, then fine. If you want a situation sometimes where Voice A has three voices, then it will 'steal' a note when one of the other voices isn't looking. It makes the most of the polyphony all the time, so you don't have to specify a number of notes per voice.

Hans has each sampler expanded to 8 Megs of on-board memory which works out at £199 per Meg at budget price and £699 if you buy the proprietary board from Akai. Eight boards at budget prices is £1194.

Since the 2 Meg memory will take a full 50 seconds to load from a high-density floppy disk you can work out that waiting for every expanded sampler to load up could take over 25 minutes, time enough to send out for a pizza and eat it. To that add the finger-drumming nuisance of altering

sample banks and disk files and you see why he needs those optical disks. These cost about £2600 but take only a few seconds to stuff 8 meg into the memory.

Optical drives are also capable of holding far more than an ordinary hard disk. It is possible that he could get away with one optical disk drive, as the \$1000s\$ have selectable identification codes on the \$CSI ports, so long as each of the 650 meg disks is set up to work with the eight samplers. According to my trusty abacus the total worth of these samplers and disk drive is £33,752. Incidentally, Akai have recently announced a 32 Meg expander board for £1500.

1000 DIGITAL PIANO

Another return to yesteryear. Launched in 1986, the Roland piano found its way into many a touring band and company. I suspect that here it is being used primarily as a master keyboard. It has piano weighted keys and several controls, although oddly enough it has no aftertouch facility. The actual piano sound is superb and its asking price was £2499, although you could drop on one at about £750 on a good day.

ROLAND MODULAR SYSTEM

"just for those serious bass noises..."

About ten years back I hired in a modular Roland system for some session work that required me to sound like Tangerine Dream meets Kraftwerk. They are pre-MIDI analogue synths and come in a series of cases.

You connect the various sections, filters, oscillators, envelope generators, together with patch cords (now you know where the term 'patch' comes from) rather like an old telephone exchange. The sounds are pretty solid, much in the manner of the original Moog sounds, and almost exclusively monophonic.

The sequencer was a laugh a minute. You set up lots of dial and knobs to squirt differing voltages at given intervals into the modules. After about ten minutes of thudding bass patterns it began to drift out of time thanks to the instability of both chips and transformer.

Nonetheless, a museum piece with a punch not often heard now-adays. I haven't a clue how much one would cost now. They were horribly expensive when they came out in the mid-Seventies and it depends whether or not you think it has added value because of its antique status.



Let's just trip through these, shall we Hans, and I'll explain what each one does and how many paper rounds you would have to do to earn the cash to buy it all.

AKAI S1000

Coming from the most popular family of sampling modules, the \$1000 is an upgrade of the \$950 which was itself an upgrade of the \$900. It came out about two years ago and all you need is about £2,700 to get you going. For that you only get the basic memory which is 2 meg.

It samples in 16 bits at the same rate as a CD player, 44.1Khz, has lots of nice features like stereo panning, a possible eight loop points per sample, cross-fades from one sample to another, sample layering, filtering and can play up to 16 notes over eight different sounds simultaneously.





TUE AMICA MUSICIO THE AMIGA MUSIC MATRIX A disk magazine for the Amiga Musician.

Issue One has Sampled Sounds from the Korg M1 in IFF Format and 8 Trak Soundtracker Software.

Issue Two with original sequences and samples for MUSIC X and OKTALYZER. MIDI System Exclusive Dumps for the D10/D20/D110 -256 new voices for all these instruments.

Also each issue has tutorials on MIDI, Music and using Amiga Basic for music playing/teaching.

Both issues available now price £10 each or you may subscribe for four issues for only £35

Phone for further details 0592 714887 or write to:



THE MUSIC MATRIX **14 MAIN STREET** EAST WEMYSS KY1 4RU





COMPUTERWISE

BRIGHTON

亩 (0273) 674626

FAX (0273) 684383

MIGA A500 £369.00

Workbench 1.3, Extras 1.3, the very first English version, four software titles, all leads and modulator, included with the above. We have 100s of software titles in stock at all times, as well as books and peripherals.

Up to £1000 instant credit for personal callers. Full written details on request. We are your Amiga specialists, so phone or call in today for all your Amiga needs



Open 10 am to 5.30pm Monday to Saturday 44 George Street, Kemptown, Brighton

George Street is opposite the American Express building.





FROM THE CREATORS OFSTOS MAESTRO

TECHNOSOUND AMIGA STEREO SOUND SAMPLER

MIX YOUR VERY OWN CHARTBUSTERS PLUG IN STEREO CARTRIDGE

TOP QUALITY SOFTWARE

- 1 TO 35 KHZ SAMPLE RATE
- TRUE AND SIMULATED STEREO
 REAL TIME EFFECTS
- COMPREHENSIVE EDITING CAPABILITY
- EXTENSIVE LOOPING FACILITIES
- SAMPLING BY MUSICAL NOTE OR FREQUENCY
- STUNNING STUDIO STYLE EFFECTS ECHO-REVERB-HALL-ROOM-PHASER

TUTORIAL CASSETTE

기도기

BROOKLANDS HOUSE BRYNGWYN RAGI AN GWENT NP5 2AA 0291-690933/690901 ONLY

£1-50 POST AND PACKING

TEL: LEEDS (0532) 637988

RST GHOIGE COMPUTERS

UNIT 8, ARMLEY PARK COURT, STANNINGLEY ROAD, LEEDS LS12 2AE

ALL PRICES INCLUDE VAT & DELIVERY. ALL OUR PRODUCTS ARE UK SPECIFICATION



COMMODORE A590 ONLY £359.99

£53 for each 1 Meg of expansion ONLY £465.99 fully populated



AMIGA FLIGHT FANTASY PACK

Inc. F-29 Retailator!! Hainbow Isla Escape from the Planet of the Ro Monster, Deluxe Paint 2, Mous odulator. Add £25.00 for Batman

£369.00

PHILIPS CM8833

reo monitor inc lead £249.00

Commodore 1084S Stereo Monitor inc Lead £239.00



AMIGA 1 MEG

Memory Expansion inc real time clock. PHOTON PAINT 2 ONLY £15.00 when you buy 1 Meg Ram Expansion

649.99

PRINTERS (inc lead)

Star LC10 mono 9 pin	£159.00
StarLC10 MK II	
Star LC10 Col	£209.00
Citizen Swift 24 pin	
Colour option for Swift	
NEC P2+ 24 Pin	£299.00
Star LC24/10 24 pin mono	£249.00

DISK AND HARD DRIVES

	-
Cumana Amiga 3.5 1 Meg	9
Amdrive 30 Meg Hard Drive£389.00)
Amdrive 50 Meg Hard Drive£449.00)
Commodore A590 20 Meg Hard Drive£369.00)
Commodore A590 inc 2 meg populated board£465.00)

COMPUTERS

Amiga Batpack inc Deluxe Paint 2, Batman, F18 Interceptor, New Zealand Story, Mouse, Modulator and manuals.

£369.00 Amiga A500 inc mouse, m

COMPUTERS

AMIGA A500 CLASS OF THE 90's

se, Music/Midi software, Graphics Desktop Publisher, Mouse Modulate

£519.00

ACCESSORIES

Naksha Mouse	£35.99
Scart Leads	£9.99
Printer Leads	£5.99
100 Capacity lockable 3.5 disk boxes	£7.99
Banx stackable disk boxes	
50 Capacity lockable 3.5 disk boxes	£5.99
Amiga dust covers	£4.99
Star LC10 cover	£4.99
14 inch monitor cover	£6.99
12 inch monitor cover	
Universal printer stand	
Mouse pads	
Mouse holder	
14" tilt and swivel monitor stand	£15.99
Midi Interface	£24 99

DISCOUNT SOFTWARE

Deluxe Paint 2	£14.99
Photon Paint 2	£24.99
Fantavision	£19.99
Comic Setter	£19.99
Kind Words V2	£38.99
Protext WP	£74.99
Publishers Choice DTP	£74.99
Mavis Beacon Typing	£24.99
Devpac 2	
GFA Basic Interpretor	
GFA Basic Compiler	
AMAS Midi Sampler	
Audio Master 2	
Doctor T's Midi Recording Studio	£49.99
Deluxe Music Construction Set	
Scribble Platinum	
Mastersound Sampler	
Deluxe Video III	£64 99
Aegis Video Titler	
Penpal	
Prodata	
Amos Creator	
Home Accounts	
Aegis Graphics Starter Pack 4 titles	£29.99
Music X	£89.99
Digiview Gold	
Quarterback Back Up Utility	£47.99

MUSIC X SEQUENCER

ONLY £89.99

DISKS

100% ERROR FREE
LIFETIME GUARANTEE
135 TPI 3.5 INCH
SONY OR MITSUBISHI BULK

10	For	£5.99
50	For	£27.99
100	For	£49.99
200	For	£97.99
300	For	£142.99
500	For	£229.99
000	For	£449.99

DISK LABELS (2p each)

...£7.99 .£13.99

OPEN 9.00AM TO 5.30PM MONDAY TO

SATURDAY OPEN SUNDAYS 10.00AM TO 3.00PM OPEN THURSDAY 'TILL 8PM FOR THE BEST PRICES, BEST ADVICE AND THE BEST SERVICE, YOUR ONLY CHOICE IS FIRST CHOICE.

Call into our showroom or order by telephone for a fast delivery Tel: 0532 637988 Fax: 0532 637 689 Please make cheques payable to First Choice







MUSIC

FAIRLIGHT

Unfortunately now dubbed 'Failight' as the Australian company that gave it life went into receivership well over 12 months ago. One of the first ever commercial computer musical instruments, it managed to compress all the functions into one. Sampling, for which the instrument was well known, was a last-minute addition to the first model in 1979 and was considered a novelty.

It could synthesize in several ways, including a cunning way of drawing three-dimensional wave forms with a light pen so that you created the sound, mixing sampled sound with synthesized sound and so forth. Sequencing was done very much like many of the sequencing programs with track and edit features with the exception that all the sounds







BLUG IN WOM SHIPS

A couple of years ago I was invited to a well known factory to have an in-depth look at the instrument they had just launched; it cost well over £12,000 and was capable of sounds that took your head off. The previous week it had been performing in public and wooing, via private concerts, several likely clients with bucks aplenty.

As the first member of the press corps to get to grips with it and having a personal invite, I felt rather privileged. Within thirty seconds I had managed to lock the whole instrument up. Not a peep could I get, not even a screen display. The only sound was my jaw hitting the floor in slow motion whilst rehearsing excuses faster than Roger the Dodger...

Switch off. Count to thirty and switch back on. Good, all the lights are winking away and off I go again. Press this, twiddle that, run through the display menus and... oh dear. Instant lock up, £12,000 worth of dead chips and kaputt keyboard.

Resisting the temptation to make for the nearest airport I picked the phone in the corner of the demonstration room and got hold of the technical department. "Blug" was the decision the learned tech team eventually came to. "Blug in WOM Ships".

Now, unless the entire series of this instrument has had its ROM replaced there are a quite a few wafting around the world waiting for the unique combination of buttons that will send those sounds disappearing into the inner universe. Aren't you glad you can't afford one?

Even as I write I spot an advert for a 'prototype laser harp with MIDI'. The starting price is £10,000. Someone has a sense of humour.

TOP: The Fairlight CMI, the first studio-quality sampling system.

MIDDLE: The nowclassic Super Jupiter contains some wonderful analogue sounds.

BOTTOM: The Yamaha TX816 Tone Module is capable of some highquality digital sounds. were inside the instrument itself and stored on hard drives.

The Fairlight was to an extent modular, in that both the memory and the hard drives, like the Amiga's, were expandable. When superior hard and software came out you traded your old stuff in.

It came out in three series and the one of the last versions with twin 20 meg floppy drives, 14 meg of RAM plus all the modules would have set you back about £120,000. Not surprisingly, a Series 1 can still fetch about £1000 and a Series 2 about £3000 upwards. However don't expect all of them to talk to your equipment as MIDI only appeared in mid-1985 as additional hardware.

Still one hell of an instrument in the right hands and the number of albums it has worked on is nobody's business. The sampling originally only used 8-bit resolution – just like most Amiga samplers. The quality was due to some heavy duty maths on data and audio compression alike.

ROLAND SUPER JUPITERS

Not as much of a luxury item as you would think. The MKS 80 Super Jupiter was a digitally-controlled analogue synth that had lots of warm, fat sounds. The ones he is carrying around are rack-mounted versions and, to help you program the sounds quickly, you have a plug-in module with good old fashioned slider controls. There are no voicing programs for this beast that I know of. Popular around 1984, but now only available second-hand at about £2000 each

Y A M A H A T X 8 1 6

Take eight DX7's, mount them in a rack and give the user options for individual or massed stereo output and you have a TX816. Launched in the spring of 1985 this little lot would

MICROPROSE SOCCER ONLY £8.99	BLOODWYCH + DATA DISC BOTH ONLY £12.99	TURBOSO
EORTHOOMING AT	TRACTIONS -	

Adidas Golden Shoe£16.99	TOP 50	CHART	3D Pool£	13.99
A.M.C£16.99	Klax£9.99	Conqueror£16.99	688 Attack Sub	16.99
Back To The Future 2£16.99	Hero's Quest (1 Meg)£23.99	X-Out£13.99	Austerlitz £	16.99
Barbarian II (Psynosis)£15.99 Battle Master£16.99	Manhunter In San Francisco (1 Meg)£19.99	Pipe Mania£14.99	Bards Tale II£	16.99
Blade Warrior£16.99	Turrican £13.99 Operation Thunderbolt £16.99	Escape from Singes Castle £26.99 Skidz £13.99	Battlehawks 1942. £	16.99
Blue Angels£16.99	Chase HQ£16.99	Super Cars (Gremlin) £16.99	Balance of Power 1990£	19.99
Bomber Mission Disc £13.99 Chaos Strikes Back £16.99	Cyberball£12.99	F-29 Retaliator£16.99	Bomber£	19.99
Codename Iceman£16.99	Iron Lord £16.99 Midwinter £18.99	Warhead£16.99	Bridge Player 2150 £	
Delta Armalyte£13.99	It Came From The Desert (1 Meg)£19.99	Emlyn Hughes Soccer£12.99	Budokan £	16.99
Dynamic Debugger£16.99	Kick Off 2 + World Cup£15.99	Ultimate Golf £16.99 Damocles £14.99	Carrier Command£	10.99
Dynasty Wars£16.99 Escape From The Planet Of The Robot	Jumping Jackson£12.99	Chess Champion 2175£18.99	California Challenge (T.D. II Disc)	£8.99
Monsters£12.99	Space Ace£26.99 Their Finest Hour£19.99	Last Ninja II£16.99	Cloud Kingdoms £ Colossus Chess X £	12.99
European Superleague £13.99	Ivanhoe £16.99	Neuromancer£16.99	Deluxe Scrabble£	13.99
F19 Stealth Fighter£18.99	Colorado£16.99	Imperium £16.99 Red Storm Rising £16.99	Demons Tomb£	12.99
Falcon Mission Disc II£13.99	Resolution 101 £16.99	Turn It£12.99	Dragons Lair (1 Meg)£	26.99
Final Battle£16.99	International 3D Tennis£16.99	The Plague£14.99	Dungeon Master (1 Meg)£ Dungeon Master Editor	16.99
Gin & Cribbage£20.99 Gold of the Aztecs£16.99	T.V. Sports Basketball £19.99 Dragons Breath £18.99	Fire And Brimstone£16.99	Elite	14.99
Hot Rod£16.99	Manchester United £14.99	Projectyle£16.99	European Challenge (T.D. II)	£8.99
Kick Off 2 £12.99	Castle Master£14.99	Shadow Warrior£16.99	European Space Shuttle£	24.99
Midnight Resistance£16.99	Rainbow Islands£16.99	Lost Patrol £16.99 Kings Quest 4 £22.99	F-16 Combat Pilot£	
Myth£16.99	Player Manager£11.99 Leisure Suit Larry 3£26.99	Space Quest II (1 Meg)£22.99	Falcon£ Falcon Mission Disc£	
Oops Up!£12.99	Hammerfist£16.99	Flood£16.99	Ferrari Formula 1	16.99
Pool of Radiance£19.99 Snowstrike£17.99	Training in the second		Fiendish Freddy's Big Top Fun£	16.99
SlySpy £16.99	STAR WARS TRILOGY - ONLY £9.99	MAGNUM 4 - ONLY £19.99 Afterburner, Double Dragon, Operation Wolf, Batman	Flight Simulator II	24.99
Starflight £16.99	Star Wars, Empire Strikes Back, Return of the Jedi	The Caped Crusader	Forgotten Worlds £ Full Metal Planet £	13.95
Star Trek V£16.99			Ghosts And Goblins£	13.99
The Keep£16.99	COMPUTER HITS II - ONLY £8.99	WORLD CUP COMPILATION - ONLY £14.99 Tracksuit Manager, Kick Off, International Soccer	Grand Prix Circuit£	16.99
The Punisher £16.99	Tetris, Black Shadow, Golden Path, Joe Blade	Tracksuit Manager, Kick Off,	Gunship£	12.99
Tie Break £16.99 Tusker £16.99		International Soccer	Heroes of the Lance£	16.99
Ultima V £19.99	DDENNER COLLECTION II CAN V CO CO	LIGHT FORDE CHILLIANS	Hillsfar£ Horse Racing£	16.99
U.M.S. II £15.99	PREMIER COLLECTION II - ONLY £9.99 Mercenary, Custodian, Eliminator, Backlash	LIGHT FORCE - ONLY £16.99 Bio Challenge, lk +, R-Type, Voyager	Hound Of Shadow. £	16.99
Vendetta£17.99	Mercenary, Gustodian, Eliminator, Backlash	Bio Challenge, ik +, H-Type, Voyager	Indy Jones The Adventure£	16.99
Welltris£14.99			Keef The Thief£	
Wings £19.99	SUPREME CHALLENGE FLIGHT COMMAND - ONLY £14.99	TRIAD 3 - ONLY £19.99	Kick Off Kick Off Extra Time	£9.99
ACCESSORIES	Eliminator, Skychase, Strike Force Harrier, Lancaster, Skyfox II	Rocket Ranger, Speedball, Blood Money	Kings Quest Triple Pack£	24 90
40 Lockable Disc Box £5.99 80 Lockable Disc Box £7.99			Knights of Crystallion£	20.99
Amiga 4 Player Adaptor £7.99	HEROES - ONLY £17.99 Barbarian II, Running Man,	WICKED GAMES PACK - ONLY £7.99	Leisuresuit Larry I£	16.99
Amiga 500 Dust Cover £4 99	Barbarian II, Running Man,	Bouncer, Paccie, Backgammon, Invaders, Ball Raider II,	Leisuresuit Larry II£	19.99
Amiga 500 Dust Cover£4.99 Batman or Fantasy Amiga 500 Packs£369.99	Licence to Kill, Return of the Jedi	Swooper, Spaceballer, Diablo, Zitrax, Othello	Manhunter in New York£ Maniac Mansions£	19.99
Box 10 Bulk Discs£6.99	A OPERIAL REFERRA	A OPECIAL OFFERDO A	Microprose Soccer	
Box 10 Sony Branded Discs£9.99	SPECIAL OFFERS	SPECIAL OFFERS •	Muscle Cars (T.D. II Disc)	£8.99
Cheetah 125+£7.99 Commodore 1084S Stereo Monitor£249.99	3 Stooges£7.99 Fernandez Mus	t Die£3.99 Netherworld£4.99	Omega£	
Contriver Mouse F22 99	Art Of Chess£4.99 Fish	£7.99 New Zealand Story£7.99	Pictionary£	16.99
Contriver Mouse £22.99 Cumana External Drive £69.99	Baal£4.99 F/ball Manager		Pirates £ Populous £	16.99
Disc Cleaning Kit£2.99		£12.99 Oil Imperium£7.99	Populous Promised Lands	£7.99
Mouse House£3.99	Barbarian Psynosis£6.99 Galaxy Force	£3.99 Pacland£7.99	Postman Pat	£6.99
Mouse Mat 6mm£3.99		main£5.99 Passing Shot£4.99	Pro Tennis Tour£	16.99
Naksha Mouse £29.99 Navigator with Autofire £10.99		£7.99 Question of Sport£3.99	Red Lightning £ Risk £	13.95
Pro 5000£12.99	Battle Squadron£11.99 Gold of the Rea Beast & T-Shirt£10.99 (1 Meg)	a. a.	Robocop. £	16.99
Quickiny Jetfighter £12.99	Blasteroids£4.99 Hard Drivin'		R.V.F. Honda£	16.99
Speedking with Autofire £9.99 Star LC10 Printer £169.99 Star LC10 Colour Printer £219.99	Blood Money£9.99 Hollywood Poke	07.00	Scenery Disk 7, 9 or 11£	11.99
Star LC10 Printer£169.99	Bloodwych£9.99 Infestation	er Pro£7.99 Sidewinder II£4.99 Sim City£14.99	Scenery Disk Japan or Europe £ Sherman M4 £	11.99
Star LC10 Colour Printer£219.99	Boulderdash Const Kit £4.99 Interphase	£7.99 Spy Vs Spy£4.99	Shoot 'em Up Construction Kit£	19 90
1/2 Meg Upgrade Only£44.99	Brian Clough's Football£6.99 Joan of Arc	£7.99 Spy Vs Spy II £4.99	Space Roque £	18.99
1/2 Meg Upgrade with clock£49.99	Captain Blood£4.99 Kristal	£9.99 Sny Vs Sny III £4 99	Steve Davis Snooker	£9.99
11/2 Meg + Dungeon Master£59.991	Centrefold Squares£7.99 Laser Squad	£6.99 Tank Attack £7.99	Super Cars (T.D. II Disc)	16.00
11/2 Meg + Dragons Lair£69.991	Conflict in Europe£7.99 Leaderboard	£6.99 Time and Magic £7.00	Test Drive II	16.95
1/2 Meg + Singes Castle£59.99 !	Cybernoid II£4.99 Lombard RAC	Hally£9.99 Toobin£4.99	Times of Lore£	16.99
1/2 Meg + Gold of the Realm£49.99	Daily Double Horse Lords of the Ris Racing	e Minoe	Turbo Outrun£	12.99
1/2 Meg + Space Ace£69.99	Dizzy Dice£4.99 (1 Meg)	cz go Treasure Island Dizzy£4.99	Ultima IV£	16.99
1/2 Meg + Hero's Quest£69.99	Dragon Spirit£4.99 Manic Miner	c7 00 Irivial Pursuits£9.99	War in Middle Earth £ Waterloo £	15.99
11/2 Meg + It Came From the Desert£69.991	Drakken£14.99 Marble Madnes	S£7.99 Trivial Pursuit New Degill£0.99	Wayne Gretzky's Hockey£	15.99
1/2 Meg + Lost Dutchmans Mines£54.99	Drum Studio£4.99 Menace	£4.99 I.V. Sports Football£12.99	World Tour Golf	£7.99
NB. If any of the above games are required	Dynamite Dux£7.99 Millenium 2.2	£9.99 U.W.S		12.99
with 1/2 plus clock, please add £3.00	Emmanuelle£7.99 Mr. Heli	£8.99 Weird Dreams£8.99	Zak McKraken£	16.99
ART & SOUND	UTILITIES 8	& BUSINESS	EDUCATIONAL	
Studio Magik£52.99 Deluxe Video III	£59.99 A-Max (Mac-Emulator) £109.99	Mavis Beacons Typing£19.99 Discover Chemist	ry£13.99 Puzzle Storybook	£19.9
Fanavision£24.99 Deluxe Music Co	ons.Set£49.99	Kindwords£37.99 Fun School II (und	der 6)£12.99 Rhyming Notebook	£19.9
A.M.O.S£32.99 Deluxe Paint II.	£9.99 DevPac II£44.99	Protext V.4£59.99 Fun School II 6-8.		£19.9 £22.9
Photon Paint II£14.99 Mastersound	£32.99 Digicalc£27.99	Pagesetter£89.99 Fun School II 8+	£24.99 German Master	£13.9
Deluxe Print II£59.99 Can Do		Appie Carity C10 00 Math Talk	£24.99 French Mistress	£13.9
		Discovery Words	£24.99 Italian Tutor	£13.9
	forthcoming attractions are released at the schedu	led time. First Letters & Wo	rds£19.99 Answer Back Junior	£13.9
These will be despa	atched within 24 hours of release, subject to availal		£19.99 Answer Back Senior	£13.9
AT COUNTY CARRED TO	CHECK PHACE DE DESC	THE CHE SELECTION	OFA BAY, OFOE OFOE	
41 SOUTH STREET, LEI	GHTON BUZZARD, BEDS	, LU7 8NT TEL: 0525 377	974 FAX: 0525 8522	78
Access	Access		Please make cheque:	S
ORDER FORM	HasterCard MSA		& PO payable to	

Computer		DATE:
		Post CodeTEL: AMIGA FORMAT SEPT '90

Turbosoft

Orders under £5 please add 50p per item. Over £5 p&p FREE in UK. Elsewhere please add £1.50 per item.

N.B. Please state clearly mode of computer & also cassette or disc when ordering



have set you back a tidy penny (£4250) then and even now weighs it at around the £1500 mark. Mind you, you can play 128 notes simultaneously (!) and summon up eight sounds from a choice of 256. Still it is cheaper and takes up less space than a clutch of DX synths.

OBERHEIM XPANDER

A much lauded analogue/FM digital hybrid synth that can play 12 notes simultaneously with 100 preset sounds on board, plus a brace of oscillators and filters. In 1985 you would have shelled out £3945 for this superlative, easy to work with piece of kit. Now a collector's item.

ROLAND RD "THE 'OLD' EMU"

Not too sure about this, but he could just be referring to an Emulator II. Launched about four years ago it is a keyboard and MIDI controlled sampler with hard disk options. The sound quality is pretty superb with an onboard sequencer plus split and layering facilities The price in 1986 was a mere £7250 and I saw one going the other month for £1250.

A Sound Price

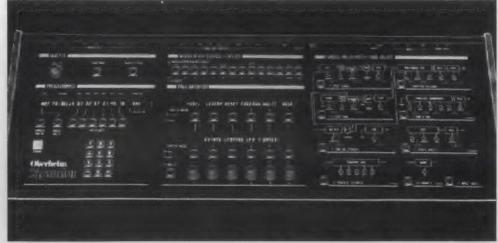
So what does all this lot add up to? Financial ruin for most of us, unless you are adept at forgery and disguise. To be sure it is one hell of a system and is by no means representative of all his kit – just what he took over to do that film score. I make it tot up to roughly £213,000.

You could look at this as 20 years worth of average wages, the cost of Luciano Pavarotti for three or four concerts, four months' work as chairman of British Airways or about 426 years doing a paper round 50 weeks each year!

You will notice that we haven't even mentioned software, sequencing and recording equipment in this budget. The set-up is a nice blend of old and new going back over the past ten years or so. Hang on to those old modules and derelict sound chips, they could make the Antiques Roadshow yet!

For A Few Dollars More

The most sick-making thing about the film scoring saga is that when Mr Zimmer has committed his score to disk and digital tape (via £12,000





worth of multi-track digital cassette), the results are sent back to the studio in Los Angeles where it would appear they have an duplicate set-up! Hold on. That's about half a million quids' worth of synths alone. Wonder what they pay for the soundtrack itself?

Pass me that WP package.

"Dear Mr Spielberg. You don't know me, but as an avid fan of all your movies I couldn't help noticing the odd inadequacy in the sound-track... loss of tension... heighten dramatic irony... dead cert best-selling album... I feel sure that the enclosed cassette could... nice flavour of bootpolish you have..."

Don't Despair

With Amiga systems like *Music X* you are getting a miniscule clone of these megasystems: *Music X* has a rather clever software MIDI patchbay, it can program and edit synths as it plays sequences without stepping out of bed, so to speak. As for direct to disk recording – well, I guess we have to wait a little, although there are hardware bolt-ons for other computers.

What we have with the Amiga music soft and hardware is a microcosm of the bigger systems. As the machine matures the kit for it gets better and better. Price for price, we are now getting significantly better sonic value for our money. And that can't be all bad news.

TOP: The Oberheim Expander, despite its age, can still hold its own today.

ABOVE: The Emulator II, which has now been succeeded by the Emax and the state-of-the-art E-III.

NEXT MONTH

we will report on professional studios that are using the Amiga as their main machine for creating music. Don't miss it.

RAP THOSE KNUCKLES

If you are thinking of maybe scraping up enough filthy lucre to hire something like a Fairlight or Synclavier for the odd gig or weekend bear the following story in mind.

A certain American rap band arrived for their soundcheck at Wembley Arena. Spotting the Fairlight lurking at the edge of the stage, the British sound engineer made adequate provision on his desk for the mighty beast, reserving several channels for its outputs. After couple of numbers he requested that the band try out the instrument so that he could get a balance:

"Oh, the Fairlight?"

"Yeah, Just fire it up with your disk so I can get a balance".

"Well we just hired it in, man, like we were told it was a good synth. You mean it needs disks?"

"Sure"

"What disks? Doesn't it make any sounds without them? Can you play it?"

"No. You'll need to hire the disks and a man to program them. Do any of you play keyboards at all?

"Er. no."

"Then you'll need a player and programmer"

At this point the UK record company rep nervously enquired about fees. It transpired that a programmer would cost about £250 for the afternoon and a player about twice that for the evening, if he could learn the show. This on top of the several hundred quid lashed out for the hire of the instrument, now looking about as much use as a handbrake on a canoe.

The Fairlight was returned to the hiring company instantly. The moral is that although instruments of this calibre are indeed superb, they take a lot of getting to know.





SEGUL CER PAGE

PUT AMIGA WILLIG ROWER IN YOUR HANDS =

Custom tailored to little eeds of a wider public Music-X 2 is both fore all redable and easier to use than it's forerunner, was -X. It still tas all the power of the original program, but where the complicated extras required as a professional. Now anyone can create and edit MIDI anguences, and with Music-X Ir, your creations are fully compatible with Music-X!



araphical, displayed to his information araphical, displayed to his information of the string by a. d., insert, such as a condition of the change aparameter, globally or selected events.



EDISCHART MATERIAL CO.

Real-time control of your MIDI hardwo and solvare from your ynthesizer keyboais. Adds power to your performances.

No Fifte and redirect you incoming MIS data system.

16 IFF or Sonix sound same ies can be located and players of Music-X Jr using your Amigas internal voices

Marketed By



The Software Business Ltd

Brooklands, New Road, St Ives, Huntingdon, Cambridgeshire NT7 4BG
Telephone (0480) 496497 Fax (0480) 495605



Roland

RULES

Employees of FUTURE

any confusion caused). The judges' decision is final (and they aren't called Roland either). No correspondence will be

entered into (even if you are called Roland). Once again, sorry for the mix-up over Roland (the

PUBLISHING and ROLAND are not allowed to enter (that's the company, not people called

Roland who are of course more than welcome to enter - sorry for

ROCK'N' ROLAND

Win a fabulous Roland music system worth over £600.

eading about all that lovely hardware on the preceding music pages should have whetted your appetite for getting your hands on some. Fret not about having to shell out mucho moolah, because those purveyors of fine electronic musical masterpieces, Roland, are giving away a system worth over £600.

The system consists of a CM-32L LA sound module, Dr T's Tiger Cub sequencer system, Dr T's Copyist Apprentice, a desktop accessory disk with the leads you need to run the system through a hi-fi, plus a PC-200 MIDI Keyboard Controller. A very impressive system indeed and it can be yours just by answering three simple questions.

HOW TO ENTER

Write the answers to the following

three questions on the back of a postcard or stuck-down-envelope and send it to:

Roland Comp, Amiga Format, 30 Monmouth Street, Bath BA1 2BW. The entries should reach us by September 17th and don't forget to include your name, address and phone number on the postcard as well.

> Roland **Inspiration Technology**

Roland

- Roll Harris in the '70s?
 - - verhead Camshaft Full-Flange ambustion Organ
 - shill stand for?

 - et Important Diddling liestrument isical Instrument Digital Interface ibile Intelligent Destructive Influence

ROLEKI 5.0

Five years to the month after Protext version 1 was launched Arnor are pleased to present version 5, an enormous leap forward in both ease of use and performance.

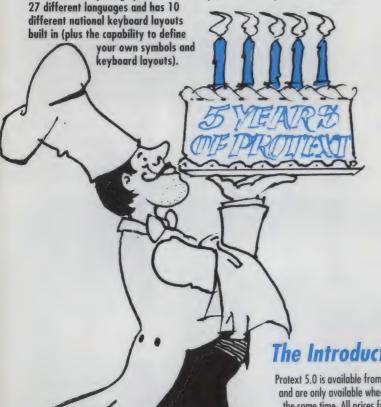
Protext 5.0 introduces a completely integrated system of pull down menus and dialogue boxes. The menus are among the many operations that may now be carried out with either the mouse or the keyboard. Protext really does give you the best of both worlds.

Protext 5.0 handles printer fonts flexibly and accurately. You can make full use of any number of proportional printer fonts, mix them freely within any line, centre them in headers, use automatically formatted footnotes. And Protext correctly formats your text as you type it, no matter how many font changes you use, showing you line and page breaks exactly as they will be printed.

Protext 5.0 is still the fastest word processor around. Even though we have made all these major improvements we have taken great care to ensure that text editing is as fast as ever. The menus work smoothly and quickly even with high resolution displays. But of course, you can use Protext's efficient set of commands and keys just as before and 5.0 remains compatible with all earlier versions from 1.0 onwards.

Protext 5.0 is a worthy successor to version 4, which was described as "the best word processor at any price", "the best text processor on the Amiga" and "the most powerful word processor on the Atari ST" (AUI, ST/Amiga

Protext 5.0 heralds a new era of multi-lingual European software, in time for 1992 and the opening up of Eastern Europe. Protext may be used in at least



The Features

A New fast & easy to use pull down menu system with dialogue boxes and alerts; file selector; mouse dragging to set blocks. Menus complement existing commands and keyboard shortcuts, do not replace them. Menus may be used with mouse or keyboard. Amiga version follows Intuition guidelines.



- Enhanced printing capabilities supports multiple proportional fonts; mixing of different font sizes on the same line; proportional formatting whilst editing; side margin, headers and footers independent of main text font. Tabs, decimal tabs and centre tabs. Extensive range of printer drivers supplied.
- Multiple file editing up to 36 files may be open; split screen editing.
- Graphics mode support on PC allows use in virtually any text or graphics mode including 132 column or 75 line VGA modes; user defined characters and on-screen bold, italics and underlining now on all versions; use of 14 different accents on any character
- & Language support includes Albanian, Basque, Czech, Danish, Dutch, English, Esperanto, Estonian, Flemish, Finnish, French, German, Hungarian, Irish, Italian, Latin, Lithuanian, Norwegian, Polish, Portuguese, Rumanian, Serbocroatian, Slovak, Spanish, Slovene, Swedish, Welsh. (Recommended printers: Star LC24, HP Laserjet II or later).
- Index and contents generation. Indexer takes marked words or phrases; contents entries automatically taken from titles wrapped in control codes; many options for style of contents output.
- Spelling checker features completely new 120,000 word Collins dictionary with very fast phonetic lookup. Anagrams and find word pattern. Foreign language dictionaries (German, Swedish available now, others to follow).
- Amny other enhancements including multi-line footnotes and endnotes; automatic timed save; add column or row of figures; indent tabs; find word at cursor; 40 column mode support; sentence operations; inter- paragraph space; much improved expression evaluator; self incrementing variables; Roman numerals; newspaper-style column printing; file sorting utility with special options for names and addresses; revised manual plus new tutorial guide.
- And don't forget Protext still includes background printing; box manipulation; macro recording; exec files; headers and footers; find and replace; mail merging; undelete; file conversion utility; configuration program; auto reformatting; on screen help; time and date; typewriter mode; line drawing; disc utilities.

The Introductory Offer Prices

Protext 5.0 is available from late August 1990 for the Amiga, ST and PC. These prices are valid until 30 September 1990 only and are only available when ordering direct from Arnor. You can also buy our database, Prodata, for half price if purchased at the same time. All prices fully inclusive. Amiga and ST versions require 1 Mb.

	Aug/Sep	from O
Protext 5.0	£125	£149.95
Upgrade from v4.2	£49.50	260
from earlier versions	£64.50	£75
Extra for Prodata v1.1	£40	£79.95
(Produte price only if ordered with 5.0 new or ungrade)		







ct 90

PHANTOM FLASHER II

In Issue 12 of Format you printed a table of "Colourful Crashes" and the reasons why they happened. If Mr Downes had caught a fleeting glimpse of an Amiga technical note and tried to relate all the information to you from memory he can be forgiven.

But how many non-technically minded Amigans have run out and bought a new 1.3 ROM because their screen flashed red, only to find that when they seated their new ROM (at a cost of anything from £30 upwards) to find that on initialisation they get an unwelcome red flash.

I am enclosing copies of the two relevant technical notes from Commodore and you will see that the "authorised" version is quite different from Mr Downes' list in a few places.

My advice would be: don't believe everything you read especially if someone else read it somewhere else first and then wrote about it. The list cannot be trusted, as maybe up to 19 out of 20 cases do not follow Mr Downes' rules.

Having repaired Amigas for two years now I think that I can say this: save yourself some money. If you get a colourful flash on power-up, ignore it. Unless you have problems with the operation of the machine or the running of software, leave well alone.

If you do have software or hardware problems take your computer to a a dealer or qualified repair person. You paid a lot of money for your Amiga (and even more if it's a 2000). Don't start shoving screwdrivers into it.

P Eckersley Mid Europe

Workbench

The usual inordinately useful selection of queries answered and tips provided is brought to you once more, this time courtesy of **KEITH POMFRET**.

THE TECHNICAL NOTES BOOT MESSAGES

When the system is powered on, most of the system hardware is checked. If an error occurs, the ROM-resident debugger is called and you can debug the machine via the serial port. At the same time the screen changes to a special colour:

Dark Grey Hardware OK Red Kickstart ROM has bad

checksum Unexpected exceptions

Yellow Unexpected exceptions have occured

Green Problem has occured while local memory is being configured

NOTE: The green symptom is present on units with socket F AGNUS contact problems.

Blue Problem has occured during custom IC

register check

Light Grey Software OK
On some Amiga 500 and 2000
machines you may come across a



PREP SCHOOL: Is there a way to deal with a PC virus on an Amiga?

the in I are

PHANTOM FLASHER: Are these chips damaged if the screen flashes?

flashing Caps Lock error. Most of the time this is caused by an error in keyboard circuitry , listed below are the possible flash codes.

1 FLASH= ROM (internal to keyboard processor)

2 FLASH= RAM (internal to keyboard processor)

3 FLASH= Watchdog timer. (IC 74LS123 or associated circuitry)

On the Amiga 2000 it is possible to test the keyboard simply by swapping with an alternate keyboard. If the problem persists then the keyboard is not the cause of the problem and trouble-shooting on the main PCB will be necessary. With the Amiga 500 it is not practical to swap keyboards in this way. In all cases either the faulty keyboard or the complete machine would need to

be repaired by an authorised service company.

So there we have it in a nutshell. When your Amiga flashes at you, it may or may not be trying to tell you that it's feeling a little bit off-colour.

The advice above is good. If something's working OK, leave it alone and remember that if you decide to open up the Amiga to pay Agnus, Denise or Gary a visit at number 68000, you will at least invalidate any warranty and possibly kill your machine.

PREP SCHOOL I

Please help me. I bought an Amiga 2000 for its ability to run PC software through the 2090 bridgeboard while retaining the other stunning abilities of the Amiga. All worked fine until I loaded some PC PD which I'm told has damaged

PHONE ANYTIME FOR FAST FRIENDLY SERVICE

AMIGA A500 PACK

512K RAM Computer - Built-in 1Mb Disk Drive, Workbench 1.3, Mouse, A520 TV Modulator, Speech Synthesis. Deluxe Paint II Art Package, Basic 1.3 Disk, Extras and Tutorials Disks. Ail leads, three manuals and even a 13A plug! £369.99

29 Retaliator, Rainbow Islands and Robot Monsters OR

FREE Batman The Movie, New Zealand Story and Interceptor Flight Sim STATE WHICH FREE PACK REQUIRED

ACCESSORIES VALUE PACK

Microswitched Joystick, Tailored Antistatic Dustcover, Mouse Mat, 10 Blank Disks, 40 Lockable Disk Box, Mouse Holder if purchased with Computer or with any order over £100 in value£24.99

PRINTERS

Star LC10	£155.99
Star LC10 Colour	£199.99
Panasonic KXP1124 24 Pin	£259.00
All complete with FREE Lead,	Ribbon,
Connecting Cable and Plug LIK M.	ade

UPGRADES FOR 1.2 AMIGAS

ROM Version 1.3 Kickstart ROM with fitt ENHANCER Consists of Workbench 1.3 at £13.99 Extras 1.3.

1Mb - 3.5' DISK DRIVES

CUMANA CAX354 Disk Drive£71.99
AMIGA A1010 Disk Drive£69.99
A.C.S. Slimline, Switch and Thru Port (NEC
or TEAC Drives)£59.99

े अ SPECIAL के अ Amiga External Drive plus Shadow Of The Beast + Kick Off + RVF Honda + Battle Squadron£109.99

HARD DISK DRIVES

AMIGA A590 20Mb Plug in Drive£359.99
Upgrade Chips per Megabyte£79.00

RAM EXPANSIONS

MIDI EQUIPMENT

DATEL Midi Master Interface	
JOYSTICKS	

JOYSTICKS	
KONIX Speedking	£9.9
KONIX Navigator	£9.9
ZIPSTICK Super Pro	£13.9
CHEETAH Mach 1	£10.9
COMPETITION PRO GLO GREEN	£15.9
QUICKSHOT 2 Turbo	£8.9
QUICKJOY 125 Superboard	£18.9
OLIICK IOV 196 let Fighter	

ACCESSORIES

ROCLOOCKILO	
AMIGA Keyboard Dust Cover	£1.99
AMIGA Monitor Dust Cover	£2.99
STAR Printer Dust Cover	£2.99
Quality Soft Mouse Mat	£2.99
Mouse Bracket (to hold mouse)	£1.99
3.5" Disk Drive Head Clean Kits	£3.99
PREMIER CONTROL CENTRE - Sits over	er Amiga
as Monitor Stand & Second Disk Dri	ive
Haldes	CAE OF

MARCONI RBQ PC9 Trackbal



DISKS - DISKS - DISKS

FULLY GUARANTEED DSDD BULK DISKS 100% Certified-either SONY, TDK

or MITSUBISHI
Unbranded-all individually wrapped & with labels
Pack of 20£9.99
Pack of 90 in our Top Quality Lockable 40
Disk Holder£13.49
19 Flip Top Disk Holder£0.89
40 Disk Holder Lockable Top Quality £3.99
60 Disk Holder Lockable Top Quality £5.99
Spare Labels, asstd. colours 60 for £1.00

EDUCATIONAL & CHILDRENS £12.49 612.49 Fun School Ω - 8 and over Micro English (GCSE) £17.99 £17.99 £15.99 £15.99 £3.99 £14.79 Micro Maths (GCSE) Things to do with Numbers Things to do with Words... AB Zoo..... Spell Book 4-6 or 7+..... Amiga Logo Mavis Beacon Teaches Typi

mavis Beacon Teaches Typing	b10.47
SERIOUS SOFTWA	RE
Kind Words V2.0	
Scribble Platinum	
Pen Pal	£94.99
Protext V4.9	E64.99
Superbase Personal	
Superbase Personal ♀	
K-Spread 2	£37.99
Digicalc	
The Works - Platinum Edition	£109.99
Home Accounts	
Digita System 3	£31.99
Personal Accounts Plus	
Small Business Accounts	
Small Business Accounts Extra	
Personal Tax Planner	
Page Setter V2	£69.99
Publishers Choice	
Starter Kit	£45.99
Home Office Kit	E94.99
Assem Pro	
HiSoft Basic	
HiSoft Basic Extend	
AMOS the Game Creator	
Trip-A-Tron	
Deluxe Paint III	£55.99
Deluxe Paint II	£29.99
Deluxe Video III	
Spritz High Quality Paint Pack	
Movie Setter	£39.99
Comic Setter	£29.99
Deluxe Music Construction Set	
Dr T's Midi Recording Studio	£38.99

THESE SPECIAL PRICES ARE MAIL ORDER ONLY AND VALID UNTIL SEPT 10TH. IF SHOPPING PERSONALLY BRING THIS AD WITH YOU OR REFER TO IT IF TELEPHONING YOUR ORDER

LEISURE SOFTWARE

LEISURE SULT WAR	-
Cartoon Capers	£12.99
Castle Master	£16.25
Combo Racer	
Damocles	
Dragon Force	£19.99
Emlyn Hughes Int Soccer	
Escape From Planet of Robot Monsters .	
Everton FC Intelligentsia	£12.99
F19 Stealth Fighter	
F29 Retaliator	
Fire & Brimstone	
Flimbo's Quest	£16.25
Football Manager World Cup Ed	
Gravity	£16.25
Hardball 2	
Harley Davidson	
Heroes Quest	£22.79
International 3D Tennis	
Italy 1990	£16.25
Kick Off Extra Time	
Kick Off 2 World Cup 90	
Lost Patrol	£16.25
Manhunter San Francisco	
Midwinter	
Powerboat Simulator	.L10.23
Resolution 101	
Retex	
Shadow Warrior	COA 00
Sir Fred	
Sword of Aragon	£10.40
Their Finest Hour	
Theme Park Mystery	616.95
Tower of Babel	
Toyottes	
Turricane	
Ultima V	
Ultimate Military Simulator	£16.25
Venus Fly Trap	
PLEASE ASK FOR DETAILS O	F
ANY GAME NOT LISTED	

AMIGA BOOK SPECIALS Advanced Amiga Basic£16.49
3D Graphics Programming in Basic...£16.99 .£14.49 Amiga C for Advanced Programmers. £27.99 Amiga Disk Drives - Inside and Out. £24.99 Amiga DOS - A Dab Hand Guide£13.99 Amiga for Beginners Amiga DOS Manual. £21.99 Amiga Graphics Inside & Out... Amiga Handbook..... 695.99 Amiga Hardware Reference Manual £20.99 Amiga Machine Language£12.49
Amiga Machine Language Guide£17.49 Amiga Programmers Handbook......£22.99



Amiga Programmers Handbook vol 2... £22.99
Amiga ROM Kernal Libraries & Devs . £27.99 Computes First Book Of The Amiga .. £13.99 Computes Amiga Programmers Guide.£15.99
Beginners Guide to the Amiga£13.99
Elementary Amiga Basic£12.49 £14.49 £13.49 Amiga Desktop Video Guide...... Kickstart Guide to the Amiga...... Learning C - Programming Graphics Inside the Amiga with C.... £15.99 £13.99 £18.99 Becoming An Amiga Artist
First Book of the Amiga
Amiga Users Guide to Graphics, So
Telecommunications £15.99 £14.49 £16.49

AUDITION COMPUTER SERVICES.

DOS 2 DOS

9A St. Peters Street, Stamford, Lincs, PE9 2PQ.
Send Cheque or phone Credit Card Details for same day despatch or come and browse in the shop. All prices include VAT and Delivery. Telephone 0780 55888 Shop Hours - 0780 720531 Out of Hours.



PROTO Hour. FAX 0462 67322. PRODUCT IN CALL CALL NOW FOR SPECIAL 0462 686977 Tel: 0462 686977 24

FRFF PRICE LIST **AVAILABLE** FREE GAMES

PURCHASE SELECTED

OFFERS

WITH SELECTED **TITLES**

£1.00 OFF NEXT TITLES

9 - 6PM

SAME DAY

686977

AMIGA	
Space Ace	.£28.99
Chase HQ	£17.99
Turbo Outrun	
Manchester United	.£16.99
Falcon	.£16.99
Falcon	.£16.99
Cyberball	.£14.99
Damocles	.£15.99
Dragons Breath	£23.99
Infestation	
Midwinter	
TV Sports Basketball	
TV Sports Football	
F29	£16.99
Conflict Europe	£8.99
Time & Magik Football Manager II	£8.99
Football Manager II	£13.99
Double Dragon II	£16.99
Populous	£16.99
Lost Patrol	
Rainbow Islands	
Wayne Gretzky	
Pipemania	£16.99
Sim City	£16.99
Fiendish Freddy	£16.99
Bomber	£22.99
Snadow Of The Beast	£14.99
X Out Operation Thunderbolt.	£16.99
Operation Inunderboit.	£16.99
Magnum 4 Ghouls & Ghosts	£24.99
Cabal	£16.99
Cabal Ninja Warriors	£16.99
Deluxe Video III	£16.99
688 Attack Sub	
Flight Sim II	
Ultimate Golf	
Leisure Suit Larry II	
Leisure ouit Larry II	120.99

Super Cars...

£14.99

••••••••••••••• • •••••••		
AMIGA		A
P47	£16.99	Dan Dare 3
Black Tiger	£17.99	Ivanhoe
Dungeon Master (1 meg	£22.99	Colossus C
Battle Chess		Barbarian I
Conqueror		Elite
Warhead	£17.99	Populus Pre
Hound Of Shadow	£17.99	Treasure Tr
Kings Quest Triple	£19.99	Rorkes Drif
Bloodwych Test Drive II	£17.99	Ultima VI
Test Drive II	£17.99	Colorado
Knights of Christalion	£22.99	Ghosts n G
Gunship Pinball Magic	£16.99	Leaving Ter
Pinball Magic	£16.99	Dragon Flig
Bodokan	£22.99	Operation S
Grand National	£13.99	World Cup
Hot Rod Tower Of Babel	£16.99	LHX Attack
Tower Of Babel	£23.99	Klax
Footballer Of the Year.	£13.99	Planet of Ro
Castle Master	£16.99	Passing Sh
Bloodwych Data Disc		Table Tenni
Player Manager	£16.99	Combo Rad
Xenon II	£16.99	Midi Interfa
Ghostbusters II	£16.99	Hunter Kille
Last Ninja II Pro Tennis Tour	£16.99	Battle Ships
Pro Tennis Tour	£16.99	Treasure Is
F18 Interceptor	£13.99	Photon Pair
Blood Money	£16.99	F19 Stealth
Space Quest III	£29.99	Cheetah 12
F16 Combat Pilot Supreme Challenge	£16.99	Navigator +
Supreme Challenge	£23.99	Fast Fax
Pirates	£16.99	Action Serv
Chaos Strikes Back	£16.99	Impossamo
Jack Nicklaus Golf	£16.99	Wipe Out
Giants Xenomorph	£23.99	Defenders
Xenomorph	£16.99	Magnum 4.
Chronoquest II		Dragons Br
Blue Angels	£16.99	Rotor
Premier Coll III Sherman Tank M4	£22.99	The Cycles
Sherman Tank M4	£16.99	Powerboat.

ZAMAZGIZA	
Dan Dare 3	£16.9
Ivanhoe	£17.9
Colossus Chess X	£16.9
Barbarian II	£17.9
Barbarian II	£16.9
Populus Promised Land	£8.9
Treasure Trap	£17.9
Rorkes Drift	£24.9
Ultima VI	£26.9
Colorado	£17.9
Ghosts n Goblins	.£16.9
Leaving Teramis	.£16.9
Dragon Flight	.£24.9
Operation Stealth	£18.9
World Cup Soccer	£14.9
LHX Attack Chopper	£34.9
Klax	£14.9
Planet of Robot Monsters	.£14.9
Passing Shot	£14.9
Table Tennis	£14.9
Combo Racer	£16.9
Midi Interface	£22.9
Hunter Killer	
Battle Ships	£9.9
Treasure Island Dizzy	£4.9
Photon Paint II F19 Stealth Fighter	£19.9
F19 Stealth Fighter	£24.9
Cheetah 125+ Joystick .	£8.9
Navigator + Auto	£8.9
Navigator + Auto Fast Fax	2599.0
Action ServiceImpossamole	£4.9
Impossamole	£16.9
Wipe Out	£16.9
Defenders of the Earth	£13.9
Magnum 4	£22.9
Dragons Breath	£22.9
Rotor	£13.9
The Cycles	£16 0

£16.99

AMIGA	AMIGA	AMIGA
Triad 3£22.99	(English)£13.99	Colonels Bequest£16.99
Nuclear War£13.99	Man Hunter San Fran£19.99	Tusker£16.99
International Championship	Red Storm Rising£16.99	Life and Death£19.99
Wrestling£16.99		Knights of Legend£19.99
Kick Off II£13.99		Oriental Games£19.99
Football Manager II World		F19 Stealth Fighter£19.99
Cup Edition£13.99		Grandslam Tennis£16.99
Treasure Trap£16.99		Thunderstrike£16.99
Triad II£9.99		Budokan £16.99
Balance Of Power 1990.£16.99		Dragon Flight£19.99
Trivial Pursuits£9.99		Atomix£12.99
Falcon£19.99		
Laser Squad£12.99		Rotox£16.99
North and South£16.99		Subbuteo£13.99
Powerdrome£16.99		Fire and Brimstone£19.99
Amos£35.00		Leisure Suit Larry III£27.99
Beverley Hills Cop£13.99		Ant Heads£9.99
World Cup Compilation £16.99		Mavis Beacon Typing£19.99
Microprose Soccer£16.99		RVF Honda£14.99
Tank Attack£16.99		Amiga Mouse & free mat &
Supreme Challenge£16.99		holder£14.99
	Turn lt£11.99	Debut£14.99
Fire & Brimstone£16.99		Theme Park Mystery£16.99
Harley Davidson£19.99		Chess Champion 2175£17.99
	Neuromancer£16.99	Intact£12.99
	Iceman£16.99	
If the product vou're looking for	is not here give us a call 1000's n	agre titles in stock Orders under

£10.00, please add 50p per item p&p. Products in stock usually sent same day.

PRODUCT	FORMAT	COST	BO/Chaguas payable to
			PO/Cheques payable to: PROTON SOFTWARE. New releases sent on day of release.
			NAME
			ADDRESS
	TOTAL		ADDRESS

PROTON SOFTWARE (AMF), ENTERPRISE HOUSE, BLACKHORSE ROAD, LETCHWORTH, HERTS SG6 1HD Tel: (0462) 686977 Fax: (0462) 673227



HALO JONES: The 'halo' fringing effect caused by dodgy digitising, shown here, can be cured.

the files on the 2090 with a virus. I can't work out how PC viruses can attack an Amiga but more importantly, the firm that I bought the computer and bridgeboard off has gone out of business. The other computer company locally isn't able to be helpful as they don't sell Amigas. What must I do to be able to use my hard disk and PC emulation again?

Nicholas Burgess Wellington NZ

PREP SCHOOL II

Hooray. I've sussed it. A nasty IBM virus on my bridgeboard ate my hard disk and after FIVE MONTHS I know how to get my hard disk back (no thanks to retailers who can rot in Hell for ignoring my letters and phone calls.

All I need to do is PREP the hard disk. Easy enough to do. Now where did I put the PREP command?. I know. The retailers neglected to let me have it!

Hey, Amiga Format. Do any of your readers rich enough to have a 2000 and 2090 happen to have the PREP command? I'm sure that one of them might be kind enough to help me get my hard disk reformatted. And while I'm asking, would anyone be kind enough to come round and install the XT bridgeboard for me? My retailer was kind enough to install the

board but then they greedily retained the disk concerned.

If anyone (and I mean anyone) can help me save the few remaining hairs in my head, please write to me at the address below.

Mike Robinson 79 Ringwood Road Southsea, Hants PO4 9TJ

PREP SCHOOL III

I'm writing to let you know of a strange hobby indulged in by certain computer retailers. They become attached to any disk that passes through their hands and won't let go without a dose of very strong medicine.

I bought a bridgeboard for my Amiga and the local dealer suggested that to avoid risking the warranty, she would have a qualified service engineer put it in and make it work (only £30 and all that peace of mind).

The Amiga with its little hard one went home with me and I remained peaceful of mind until a month later when trying to be a smartass, I infected the bridge-board with a virus that killed everything on it.

Unwilling to pay another thirty Thatchers, I decided to do the job myself as the machine was now just out of warranty. On checking, I found that the shop had retained the disks with the necessary files

to redo the disk. The obligatory phone call to my dealer recieved an offer to redo the disk at £45 (the price had now gone up) but an absolute refusal to part with the necessary files to allow me to do it myself.

The remedy was as follows.

- 1 A stiff letter to the dealer explaining that the files were my property and threatening action if they weren't sent to me.
- 2 A stiffer letter to the local Trading Standards Officer outlining my complaint.
- 3 A Writ issued in the small claims section of the local County Court citing the case.
- 4 Letters of record to every publication in which the dealer advertised outlining why I considered publishing adverts from this dealer to be dishonest and misleading
- 5 A letter to the local Police suggesting that the retaining of my property was at least theft and could only lead to the illegal use of the files in question.

The net result was an immediate offer to do the job for free and a request that I stop all action. As a matter of principle I have decided to continue all action if only to remind the dealer that customers should be treated with respect, not contempt.

Rob B West London



So letter 2 answers letter 1, letter 3 answers letter 2 and the unscrupulous capitalist takes her chances with the courts of the land. A fairy-tale ending to a common problem.

The one real lesson to be learned from this situation is that if you attempt to emulate another machine, you lay yourself open to its problems. In this instance we see Amiga 2000s catching a cold from the IBM PC virus but with the trend toward Mac/PC/BBC/ST and other emulators you must remember that this brings, with each one, the problems as well as the advantages.

HALO JONES

In the recent feature article "Digitiser Masterclass" it was explained how best to avoid the 'Halo Effect' when the video camera is knocked or shaken. Obviously buying a tripod is the best answer but what should you do if you're stuck with a digitised frame that already suffers from the dreaded 'Halo Effect'?

If you have a copy of *Pixmate* and *DPaint* it's your lucky day so read on. (If you haven't, you really should slip down to the nearest software emporium and purchase them before continuing.)

- 1. Load the offending picture into Pixmate and select Extract RGB fron the Color menu. This will save the picture as three 16-colour IFF ILBM files for use in DPaint or any other non-HAM paint package
- 2. Load the first file (Filename.RGB.red) into *DPaint*.
- 3. Swap to the spare screen and then load the second file (Filename.RGB.grn) into the spare screen in *DPaint*.
- 4. Check to see if either appears to move by flipping back and forth between the two.
- 5. If you don't spot any movement, try loading the third file (Filename.RGB.blu) into one of the screens and repeat step 4.
- 6. When you discover which of the frames is out of line, pick it up as a brush, clear off the old image by blanking over it, reposition the brush, stamp it down and save it out. You may have to guess at the amount of shift required to bring it in line with the other two frames.
- 7. Quit DPaint and return to Pixmate. Select the first file (Filename.RGB.red), then go to merge RGB on the Color menu.



Use either to 32 or to HAM depending on the mode of your original file. Select the remaining frames when prompted.

- 8. With a little luck your picture will be recombined with little or no Halo effect.
- 9. Say: "Thanks Paul for a brilliant and useful tip.'
- 10. GOTO Bar
- 11. Buy pint of Stella for Paul
- 12. Buy pint of Scruttock's Old Dirigible for Keith
- 13. GOTO 11

Paul Bellamy

And why not? I had to make some slight adjustments to instruction 11 by adding steps 12 and 13 which I'm sure you'll agree is a desirable loop designed to restore the full hydraulic equilibrium. As with many untried programs, the loop may cause a full system crash, in which case, extensive debugging and system development trying out various other variables (such as Dortmunder, Becks, Freugmeister, Boddingtons etc) is the best solution. The only real potential problem (with this routine other than the hangovers) is that after a litre or several, everything will have a bloody halo.

CHEAPSKATE!

Here's a cheap solution to the problem that you get if you blow the fuse on the joystick/mouse ports. To avoid losing your machine for weeks on end and paying loads of money you can do the following.

It is quite possible to take the necessary five volt power supply from the external disk drive connector at the back of your Amiga and use it to drive the joystick/mouse port.

By simply linking pin 12 of the disk connector to either joystick port pin 7, the mouse and joystick recieve the required five volts. No fussing about waiting for your computer to be fixed or waiting

If I were you, I'd start saving up the money that you imagine you're saving because you will certainly need it in the near future. The sort of make do and mend repair work that you describe is the domain of the cowboy repair shops that we hear so many sorry tales of. If a fuse goes, it is an indicator that something's wrong and needs attending to.

fix the original problem and then compound it by 'borrowing' power from elsewhere you will no doubt see some other problem before long. The disk drive power supply is there for the exclusive use of an extra disk drive. If you are using the disk drive power supply for a mouse and joystick and then choose to add an external drive, you could overload the drive power supply and end up with twice as many problems.

LEAVING THE AMIGA?

I want to upgrade from my Amiga A500 and the possibilities within my financial capabilities are:

- A memory upgrade to take my A500 to a total of 1024K and an external disk drive.
- An Atari 1040STE which my friends who own STs tell me is an enhanced machine that beats the Amiga hands down for speed, sound and graphics.
- · A build-it-yourself PC from one of these component suppliers who haunt the back of all the PC magazines. Although you are an Amiga magazine, I expect truthful answers as a lot of my cash could be on the line.

Nigel Smalley Wolverhampton

Echo "Recoverable Ramdrive Autoboot V1.0" Echo "*nMounting device 'RAMBO'" Mount Rad. Echo "Done" Echo "*nMaking needed directories in Ramdrive" for yonks and paying a hefty fee. Echo "Creating C Directory" Samuel Chan Makedir Rad:C Isle of Wight Echo "Creating S Directory" Makedir Rad:S Echo "Creating Libs Directory" Makedir Rad:Libs Echo "Creating Devs directory" Makedir Rad:Devs Echo "Creating L Directory" Makedir Rad:L Echo "*nMade directories C,S,Libs,devs,L" Echo "" Echo "*nNow copying important data to Ramdrive" Echo "Copying needed commands" Copy C/LoadWB|EndCLI Rad:C If you neglect to source and Echo "Copying Icon Library" Copy Libs/Icon.Library Rad:Libs Echo "Copying System Configuration" Copy Devs/System Configuration Rad:Devs Echo "Copying Ram-Handler and disk validator" Copy L/Ram-Handler|Disk validator Rad:L Echo "*nMaking Startup Sequence" Echo > Rad:S/Startup-Sequence "LoadWB*nEndCLI"

Echo "*ec"

Take the memory upgrade and extra drive. You will benefit from staying with a system that you know and of your three options, this one seems to be the cheapest as wrell as the most prudent.

Echo "All Done!!"

The Atari STE is an enhanced ST that goes some way toward providing some of the features of an Amiga on an ST. Without jumping feet first into the ST/Amiga debate, the STE runs TOS1.6, the latest version of the ST operating system, but despite gargantuan efforts by programmers has a massive software incompatibility list, refusing to run many dozens of ST titles.

A PC might be a solution for someone who wished to step backwards into an archaic operating system and architecture that is about twelve years out of date. The PC is well supported and has a huge base of softwarte but the culture shock of moving from an Amiga to a PC could be a retrograde step. Would you like your car to have a crash gearbox and brakes only on the back wheels?

LIKE RAD, MAN!

I guess that all you clever dicks at AF are all familiar with the device rad: (the recoverable ramdrive device) I wonder how many readers will have noticed that it is in the mountlist on the workbench disk. In case you don't know, it's a 21-cylinder RAM disk that stays in memory even after reset (Ctrl/Amiga/Amiga). It is even possible to boot up from this as long as there is no disk in DFO:

I have written a small batch file using the text editor Ed. to make this facility easy to run. Just type it in using the editor and use the command EXECUTE to get the program to start.

ı
۱
ı
ı

CHEAPSKATE: If your joystick won't work because the port fuse has blown, the last thing you want to do is botch a repair.

Comma	and	Writing	Background	Effect
Echo	"*c"			Clear screen
Echo	"*n"			New Line
Echo	"*E[1m"			Bold Type
Echo	"*E[2m"			Italic Type
Echo	"*E[3m"			Underline Type
Echo	"*E[34m"	Blue		Change Colour
Echo	"*E[35m"	White		Change Colour
Echo	"*E[36m"	Black		Change Colour
Echo	"*E[37m"	Yellow		Change Colour
Echo	"*E[40m"		Blue	Change Colour
Echo	"*E[41m"		White	Change Colour
Echo	"*E[42m"		Black	Change Colour
Echo	"*E[43m"		Yellow	Change Colour
Echo	"*E[8m			Freeze Cursor
Echo	"*E[Om			Reset All

Amiga peripherals that won't cost you an arm and a leg...



M.E.S. aren't tied down to any one manufacturer. Our aim is to bring you the best Amiga peripherals from all over the world.

RAM UPGRADES

MES HALF MEG (with free 1MB Demo)

MINIMAX + 2 MEG INTERNAL

EXP 8000 + 8 MEG INTERNAL (2MB fitted)

MICROBOTICS 8-UP 8 MEG A2000 (2MB fitted)

SUPRARAM 8 MEG A2000 (2MB fitted)

HARD DISKS - SYSTEMS BY VORTEX, XETEC. GVP, SUPRA, MICROBOTICS - CALL FOR PRICING

68030 ACCELERATOR CARDS - A2000 FROM

A590 RAM UPGRADES

1 MEG

2 MEG

COMPETITION Win a floppy drive!



Send your caption on a postcard to the address below, along with your name and address.

TRADE ENQUIRIES WELCOME



Send cheques to: Dept AF

Memory Expansion Systems Ltd. Britannia Buildings, 46 Fenwick Street, Liverpool L2 7NB

(051) 236 0480

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE





(051) 236 0480 • 24 Hour Sales (051) 227 2482 • 24 Hour Fax

ALL PRICES INCLUDE VAT & DELIVER

Buy with confidence from one of the longest established ompanies in their field, with a reputation for good service and prices. We have invested heavily in a computer system to enable our Telesales staff to provide up-to-the-minute stock information, coupled with highly efficient order processing. Our fully equipped Workshop enables us to carry out almost any repair on our premises. We feel sure that you won't be disappointed if you choose Evesham Micros.

All our A500 Packages include the following:

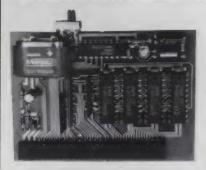
Goldrunner Leatherneck Karate Kid II Battle Squadron

Defcon 5 High Steel Night Walk

Wordwright (w processor) Nigel Mansell's Grand Prix Better Dead than Alien Super Huey

Amiga 500 512K Batpack includes 4 software titles and TV modulator	£379.00
Amiga 500 1Mb Batpack includes our 1Mb RAM Upgrade with Clock fitted	£415.00
Amiga 500 Batpack with Drive includes our 3.5" External Drive	£435.00
Amiga 500 1Mb Batpack with Drive	-
features our 1Mb Memory Upgrade plus 2nd 3.5" External Drive	£470.00
Amiga 500 512K Flight of Fantasy pack includes 4 software titles and TV modulator	£379.00
Amiga 500 1Mb Flight of Fantasy pack includes our 1Mb RAM Upgrade with Clock fitted	£415.00
Amiga 500 Flight of Fantasy pack with Drive includes our 3.5" External Drive	£435.00
Amiga 500 1Mb Flight of Fantasy pack with Drive	
features our 1Mb Memory Upgrade plus 2nd 3.5" External Drive	£470.00

AMIGA A500 SOLDERLESS RAM UPGRADES



512K RAM UPGRADE

including VAT & delivery

512K RAM/CLOCK UNIT FEATURES:

- ☆ Direct replacement for the A501 expansion
- ☆ Convenient On / Off Memory Switch
- ☆ Auto-recharging battery backed real-time Clock
- Compact unit size: Ultra-neat design
- ☆ Only 4 low power consumption FASTRAMs

512K RAM Expansion also available without clock for only

£34.95

RAM

☆ Fully populated board increases total RAM to 2MB!
☆ Plugs into the trapdoor expansion (as with 512K unit)

Auto-recharging Battery Backed Real-Time Clock
 Socketed FASTRAM ICs for accommodation up to 1.5 MB

Note: when installing over 512K, an internal connection to the GARY chip is required. Unpopulated RAM Expansion Board with Clock £39.95 RAM Board with Clock, with 512K FASTRAM installed € 69.95 RAM Board with Clock, with 1 Mb FASTRAM installed RAM Board with Clock, with full 1.5 Mb FASTRAM installed .. £119.95

AMIGA CESSORIES

Vidi-Amiga video digitiser package £95.00
Vidi-Chrome colour accessory for above £16.00
MiniGEN Genlock Adapter £95.00
A-Max Mac Emulator with 2x Mac ROMS £249.00
A-Max Mac Emulator without Mac ROMS £129.00
5.25" External Floppy Drive 40/80 track
switchable (360/720K) with throughport £99.00
Contriver Hi-Res Mouse Package including
mouse mat & mouse pocket£22.95
Naksha Mouse Package (also compatible
with Atari ST and Amstrad PC) £28.95
Roland CM32L Sound Module£350.00
Roland CM32P PCM Sound Module£430.00
Roland PC200 Keyboard for above modules £160.00
Amiga Replacement Power Supply Unit
(Genuine Commodore Amiga Type) £39.95
Amiga A500 Dust Cover £ 4.95

BOOKS

Amiga BASIC - Inside and Out	£18.95
Amiga for Beginners	£12.95
Tricks and Tips for the Amiga	£16.95
More Tricks and Tips for the Amiga	£14.95
Amiga Disk Drives - Inside and Out	£27.95

Star LC10, inc. 2 extra black ribbons	£ 159.00
Star LC10 colour, inc. 2 extra black ribbons	€ 209.00
Star LC10 Mk.II improved speed 180 / 44 cps	£ 199.00
Star LC24-10 24 pin, excellent value	£239.00

12 months On-site Maintenance included with all Star FR and XB models: also available for any other Star

printer for only £ 7.95 extra !	
Star FR-10 9pin 300/76cps 16 NLQ fonts	£399.00
Star FR-15 as FR-10, wide carriage	£ 499.00
Star XB24-10 24pin; 4 SLQ, 25 LQ fonts	£ 499.00
Star XB24-15 as XB24-10, wide carriage	£649.00
Star Colour Upgrade unit for XB or FR models	€ 39.00
Star SS10DM c/s/feeder for FR10 / XB24-10	£ 100.00
Star SS15DM c/s/feeder for FR15 / XB24-15	£170.00
Star LC15 wide carriage vers. of LC10	£329.00
Star LC24-15 wide carriage vers. of LC24-10	€ 409.00
Star Laserprinter 8, 8ppm/300dpi	
(price inc.1 year on-site maintenance)	1599.00
Olivetti DM100S excellent value 200/30cps printer	
to at all a 40 and the state of	

including 12 months on-site maintenance £ 129.95
Olivetti Auto Cut Sheet Feeder for DM100S £ 79.95
Olivetti PG-306 laser; 512K RAM, HP compatible £ 976.35
Olivetti PG-306 as above, with PostScript Upgrade £ 1749.00
Epson LX400 budget 10" £ 159.00
Epson LQ550 10" 24pin £ 349.00
Epson LQ550 10" 24pin £ 349.00
Epson LQ400 excellent value 24 pin £ 229.00
Panasonic KXP1180 multi-leature 9 pin £ 179.00
Panasonic KXP1180 multi-leature 9 pin £ 259.00
Panasonic KXP1124 24pin printer £ 259.00
Panasonic RXP1624 24pin wide carr. printer £ 399.00
Panasonic P37 cut sheet feeder for KXP1180 £ 95.00
Panasonic P36 cut sheet feeder for KXP1124 £ 109.00
Hewlett Packard Deskjet Plus (300 dpl inkjet) £ 595.00
Hewlett Packard Laserjet III fine 300dpl laser £ 1595.00 ncluding 12 months on-site maintenance £129.95

PHILIPS 15" FST TV/MONITOR (MODEL 2530)

With its dedicated monitor input, this model combines the advantages of a high quality medium resolution monitor with the convenience of remote control Teletext TV - at an excellent low price !

- Suits ST or Amiga (cable supplied)
 Fastext Teletext; on screen graphics
 Full infra-red remote control
 SCART Input/Output Connector
 Audio/Composite Video inputs
 60 TV tuner presets
 Headphone private listening jack
 External aerial input (loop supplied)

£269.00 includes VAT, delivery and computer connection lead



COMMODORE A590 HARD DRIVE

Good quality Commodore Hard Disk unit, including its own PSU and built-in cooling fan. Features sockets for up to 2Mb of on-board FASTRAM expansion (see below), 80ms Access time, with up to 2.4Mb/sec transfer rate. Autoboots when used with Kickstart 1.3. A590 Hard drive (20Mb) £379.00

NEW! - 40Mb A590 Specially upgraded model for only .. £499.00

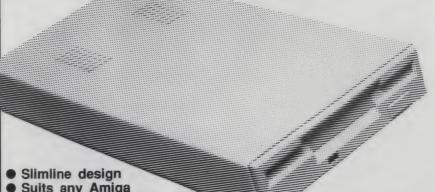
A590 RAM Upgrades

Upgrade kit comprising of D-RAM FASTRAM IC's. We will fit the upgrade free of charge when bought with an A590.

A590 512K RAM Upgrade kit £36.00 A590 1Mb RAM Upgrade kit £70.00 A590 2Mb RAM Upgrade kit £135.00

AMIGA SOFTWARE WORDPROCESSING Kind Words Version 2 **ACCOUNTING** Digita Home Accounts SBA Cash SBA Extra £18.95 £89.95 **GRAPHICS** Deluxe Paint 3 £59.95 Deluxe Video 3 £84.95 **PROGRAMMING** AMOS Game Creator AMOS Sprites £11.95 £39.95 Hisoft Devpac 2 .. £44 95 GAMES AND SIMULATIONS £16.95 Battle Squadron £18.95 £18.95 F-19 Stealth Fighter F-29 Retallator Kick Off 2 £18.95 £14.95 £16.95 Treasure Trap **MISCELLANEOUS** Super-Plan Spreadsheet

3.5" EXTERNAL DRIVES



Suits any Amiga

Very quiet; does not 'click'

Quality Citizen drive mechanism

On / Off switch on rear of drive

880K Formatted capacity

Throughport connector

Long connection cable for location either side of computer

Fully guaranteed for 12 months

5.25" External 40/80 Track Drive also available, only £99.00

THOS Special New Products

Superbase Personal Version 2

twin ergonomic stereo speakers, amplified

HEAR THAT STEREO!

Your Amiga produces excellent quality hi-fi stereo sound. Enjoy stereo sound reproduction to the full with this great new twin speaker system! Incorporates a specially designed, good quality amplifier with adjustable volume control, to obtain the best sound.

including VAT and Delivery £34.95



MIDI INTERFAC

GET CONNECTED!

Our new fully compatible, high quality MIDI interface connects directly with the Amiga serial port and provides IN, OUT and THRU ports for good flexibility. Features LED Indicators on each port to assist ease of use and also for diagnostic purposes. Superb compact design.

KRAFT TRACKBALL

EFFICIENT MOUSE OPERATION -IMPROVED GAME PLAY!

Very high quality trackball, directly compatible to any Amiga, ST or CBM'64, plus many others. Operates from the mouse or joystick port, and features selectable drag control / autofire button for versatility and better action. Left or right hand use, with total one handed control. Top quality construction and opto-mechanical design delivering high speed and accuracy every time. No driver software required!



ONLY £44.95

STEREO SOUND SAMPLER

Superb low price!

including VAT

and delivery

S-S-SAMPLE THIS!

Offering full compatibility with almost any Amiga audio digitiser software, our Sound Sampler features excellent circuitry, yielding professional results. The excellent circulity, yielding professional results. Intermain A/D converter gives a digitising resolution of up to 50 KHz, with a fast slew rate. Two phono sockets are provided for stereo line input, plus an option for microphone. Adjustable gain is achieved with built-in control knob. Complete with public domain disk containing sound sampling applications/utilities.

63 Bridge Street Evesham Worcs WR11 4SF 17 0386-765180 fax: 0386-49761 Open Mon-Sat, 9.00 - 5.30 5 Glisson Road Cambridge CB1 2HA 12 0223-323898 fax: 0223-322883 Open Mon-Sat, 9.30 - 6.00 Specialist Education Centre

1762 Pershore Road Cotteridge Birmingham B30 3BH \$\overline{1}\$ 021-458 4564 fax: 021 - 433 3825 Open Mon - Sat, 9.00 - 5.30

ALL PRICES INCLUDE VAT AND DELIVERY

Same day despatch whenever possible. Express Courier delivery £5.00 extra.

MAIL ORDER DEPARTMENT Unit 9 St Richards Rd, Evesham, Worcs WR11 6XJ



8 lines, Open Mon-Sat, 9.00-5.30. Fax: 0386-765354 Technical support (open Mon-Fri, 9.30 - 5.30): 0386-40303



Send an Order with Cheque, Postal
Order or ACCESS/VISA card details

Government, Education & PLC orders welco
All products covered by 12 Months Warran
All goods subject to availability, E. & O.E.



68030

C.S.A.

ACCELERATOR CARD FOR AMIGA A500 & B2000

Upgrade your A500 or B2000 to more power. Asynchronous design, surface mount technology provides blazing fast CPU performance at 25 and 33 MHz. Switches to 68000 mode when required. Optional math co-processor can run up to 50 MHz for racing through rendering, ray-tracing. 32BIT wide SRAM for putting Kickstart into RAM for blazing fast operations. Uses your existing 16 bit wide ram or use the optional 1-8 meg 32 bit ram board, double socketted for 4 meg OR 1 MEG Drams This board can give you up to 11 times performance gain over a standard Amiga. Wait state selectable RAM gives faster throughput. Rendering an animation in Scupt 4D that took 18 hours in 68000 mode took just 32 minutes in 68030 mode, Faster than Commodore's 68030 board. Unlimited upgrade capability-expand as your needs and wallet allows.. LOWEST priced 68030 accelerator for any Amiga The same board for the A500 fits in the B2000 so your upgrade path is secure. You can start with the bare board then add the co-processor, 32bit SRAM, then the 32 bit memory board, later put a 33 MHz 68030 in and upgrade the 68882 to 50 MHz. Technical support available.

25 MHz board	£699
25 MHz 68882 (Co-Pro)	£230
33 MHz board	£835
33 MHz 68882 (Co-pro)	£290
50 MHz 68882 (Co-Pro)	£499
32 bit SRAM	£299
meg 32bit ram board Zero	
2 meg 32 bit and board	£375
(All the above fit INSIDE the	A500!)
Send for full specification,	
prices and combination	ons

EXCLUSIVELY FROM US

GET AMIGA 3000 POWER IN YOUR MACHINE!

37 CECIL STREET, LYTHAM, LANCS, FY8 5NN Tel 0253-734218 Fax 0253-736035

Callers by appointment please. Open 11am-6pm Mon-Friday ON-LINE support number available. PRICES INCLUDE VAT We are the Official Distributors for SPIRIT Tech & C.S.A. ASK FOR OUR FREE CATALOGUE OF OUR OTHER PRODUCTS THAT WE ARE UNABLE TO LIST HERE.





MEMORY

512k no clock £39 with clock £45
2 meg internal £199
8 meg external 2 meg installed £325 with 8 meg £699
B2000 8UP with 2 meg £299 with 8 meg £699
Memory expansions available for the A1000

HARD DRIVES

B2000 auto-booting and ready formatted VERY FAST 44 meg £450; 66 meg £550; 87 meg £699; 124 meg £799

A500/A1000 drive kits-we supply all you need, you supply the ST506 hard drive £299(RLL) £289 (MFM) 44 meg system complete £499 66 meg £599 larger avail

BEEFY BOY

No more power problems for A500 owners with our 150 watt fan cooled unit at £69

MUSIC SOFTWARE

MUSIC X full pal version £79 with Midi £99 SONIX £15 AUDIOMASTER £25 SOUND TRAP 3 sound sampler £29

X-COPY version 2.9 SOFTWARE & HARDWARE £19.95

Includes full printed manual Upgrades (send original disk) £3.50



FAT TRAPPER

FAT TRAPPER IS A 4 MEG RAM BOARD THAT FITS IN THE TRAPDOOR SLOT UNDER THE A5001

(Where the normal 515K expansion goes)

Only the market leaders in this field, SPIRIT could bring you such a lovely piece of kit. Forget your 1.5's, your 1.8's and even the 2 meg boards just out. Make a quantum leap to new technology. Populate it as 512k. 1 meg, 1.5 meg 2 meg & 4 meg.or other half-meg increments Works with 512k chip ram and 1 meg chip ram-switchable. (Fatter Agnus Dip switch control for 5 position selection to Enable/disable the autoconfigthe addmem- Fat Agnus/Fatter Agnus- various start and end memory addresses. NO leads to the GARY chip thus eliminating potential damage to this expensive chip. This board can be configured to any situation or use with software support disk.

Zero K board £99 1 meg £189 2 megs £279 3 megs £369 4 megs £449



TIME FOR ACTION: The CDTV, like the Amiga range, is setting standards for the future.

This batch file is shown top right on Page 124. If at any time you wish to get rid of the RAM drive either turn off the computer or use the REMRAD command. It will help if you have more than 512K of memory.

As well as the above batch file, in the bottom right-hand corner of Page 124 is a table that I've made of some of the useful ECHO commands and functions. It is probably documented somewhere but but since I haven't run it

to ground and I'm sure many other Format readers haven't either, here it is. I hope that the several hours that I took finding these out can save your readers a similar time wasted.

Andrew Nicholas Hassocks, W Sussex

TIME FOR ACTION

As a potential purchaser of an A500 could you enlighten me on a few points. Is now a good time to buy an A500?

- 1. Will there be a new version of AmigaDOS borrowed from the new A3000 machine?
- 2. Is the CD Amiga console (the CDTV) worth considering?
- 3. I have read that the Amiga has a bleak future. Could this be true?

Lyndon Hill

The summer is traditionally the lull in the computer market and the time for the best bargains so if your criterion is one of cost, shop around for a hungry retailer. The



down side of that is that manufacturers traditionally update their model range in the autumn in time for the Christmas rush.

Thankfully, with the Amiga you can often get the best of both worlds as most of the upgrade paths so far can be either retrofitted or have been 'cloned' by third party suppliers. When the A500 was originally concieved, it had no specific bus or expansion slot for a bridgeboard or hard drive but the open architecture of the Amiga and the ingenuity of companies supporting it have made it the most flexible and upgradable system yet.

When you ask if the CD Amiga is worth considering, you don't say what you would use it for. It is a well specified system and if a CD system is what you need, will fill the bill admirably.

Far from it having a bleak future, the Amiga is ready to keep on setting standards by which all other computers will be judged.

ON THE MOVE

I intend to start a small removal business utilising a 7.5 tonne lorry, an unwilling wife, several offspring and my trusty Amiga. I already have the lorry (A Fiat OM75Ti), the wife (Joanne, 36, one owner, no rust) and the offspring (Paul, Andrew, David, aged between 15 and 18 and reasonably sturdy). The Amiga has had extra memory grafted on and now is a 1 megabyte machine with

a couple of drives. I have a word processor, spreadsheet and database, can persuade it to print labels and reports and with an ink jet printer it puts out some quite acceptable text and pictures.

A company that has offered me sub-contract work uses a routeplanning system on their PC that gives mileage and routes. It is called Autoroute. Will it run on my Amiga? I don't want to buy a PC (but would budget £500 for it if there was no other way). So my question is simply, is there any way that I can either run this Autoroute (or a similar program) on my Amiga (or even under emulation of some sort)? Failing this, would it be eaasy to write a database that could calculate the shortest distance between points and plot the best route.

> Joe Foden Crewe, Cheshire

Autoroute is only available on the ST and the PC and was the original route planning PC software. Since it

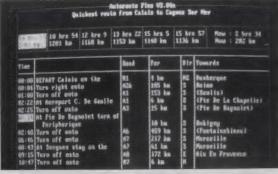
Autoroute Plus, which will only run on a PC with a hard disk drive. The plus version has facilities for cost and optimisation overlays to be added and is better suited to a commercial environment but if you are planning a one vehicle operation and the main need is to calculate and print out routes there are three possible options for you.

1. Get a cheap PC. With this you will

was originally written it has been massively upgraded to

- 1. Get a cheap PC. With this you will have a dedicated machine for your route planning. Autoroute will run on this (as long as you at least have a CGA graphics card) but you'll need a hard drive to run Autoroute Plus (and an overdraft if you add all the modules on too).
- 2. Fit the A500 Bridgeboard in the memory trapdoor underneath. This will allow you to run Autoroute but not Autoroute Plus. It utilises your existing hardware and allows you to remain with a machine that you know your way round.
- 3. Get an ST... no, forget I even said that, it doesn't bear thinking about.

The first option is probably the easiest in terms of logic but you will then be the possesor of an inferior machine to do a job that is quite possible on your Amiga given hardware add-ons. No one with ten percent of half a brain would even consider buying an ST if they could do the job in question just as easily on their Amiga.





CROSMA

Titles marked * are not yet available and will be sent on day of release. Please state make and model of computer when ordering P & P Inc. UK on orders over £5.

Less than £5 and Europe add £1 per item. Elsewhere please add £2 per item for airmail. These offers are available mail order only.

Tel orders: 0908 564369 (24 hrs)

★ TEENAGE MUTANT HERO TURTLES £24.99 ★ ★ AMIGA 512K RAM + CLOCK £44.99! ★

GAME	AMIGA	GAME	AMIGA	GAME	AMIGA
1/2 Meg Upgrade	44.99	Future Wars		Powermonger*	16.99
1/2 Meg Upgrade with clock.	49.99	Ghostbusters 2	16.99	Precious Metal	15.99
Addidas Football 588 Attack Sub	16.99	Ghouls and Ghosts*		Pro Tennis Tour	
AMOS*	34.99	Gold Of The Americas	16.99	Red Storm Rising	
Austerlitz		Gold Of The Aztecs		Resolution 101*	16.99
xels Magic Hammer		Golden Shoe*Grand National	16.99	Rorkes Drift	
.A.T.*ack To The Future 2*	16.99	Grand Prix Circuit	16.00	Rick Dangerous 2*	15.99 5
lalance of Power '90	16.99	Gravity	16.99	Risk	
lards Tale 1 or 2 Hint Book	5.99	Gunship		Robocop	
Bards Tale 2 Batman The Movie		Hard Drivin		Robocop 2*	16.99
Battle Of Britain*		Heavy Metal Heroes*		Rocket Ranger 2	
Battlechess		Highway Patrol 2	16.99	Run The Gauntlet	
Battle Command*	16.99	Hillsfar	16.99	RVF Honda	14.99
Battlemaster*		Hounds Of Shadow		S Quest 1, 2, 3, Hint Book	6.99
Beach VolleyBilly The Kid*		Imperium*		Shadow Warriors*Shadow Of The Beast	22.00
Black Tiger	16.99	Indy Jones Action		Sherman M4	18.99
Blade Warrior*	16.99	Indy Jones Adventure	16.99	Shinobi	12.99
Blood Money	16.99	Indy Jones Hint Book	6.99	Shoot 'em Up Con Kit	19.99
Bloodwych Data Disk Bomber	21.00	Interceptor	16.00	Silent Service	13.00
Boxing Manager	13.99	Int Champ Wrestling		Sim City	19.99
BSS Jane Seymour*	16.99	Int Soccer Challenge*	16.99	Sim City Terrain	13.99
Budokan		Iron Lord	16.99	Sir Fred	
Cabal Carrier Command		Italy 1990*		Sideshow	
Castle Master	16.99	It Came From The Desert Data*		Skate or Die*	16.99
Cavadar*	16.99	Ivanhoe	16.99	Sleeping Gods Lie	14.99
Chase HQ	16.99	Jack Nichlaus Extra Courses	8.99	Sly Spy*	16.99
Colorado*		Jack Nichlaus Golf Jack Nichlaus Unlimited Golf		Snowstrike*	16.99
Combo Racer* Commando	13.99	Jumping Jackson		Space Ace	
Conflict Europe	16.99	K Quest 1, 2, 3, 4, Hint Book	5.99	Space Harrier 2	13.99
Conqueror	18.99	Keef The Thief	16.99	Space Harrier 2 Spy Who Loved Me*	13.99
Continental Circus		Keef The Thief Hint Book Kennedy Approach	5.99	Star Trek V*	1600
Corporation* Crackdown		Kick Off		Star Wars Trilogy Star Flight	14 00
Crazy Cars 2		Kick Off 2*		Star Flight Hint Book	E 00 110
Cyberball	13.99	Kick Off Extra Time	7.99	Star Glider 2	14.99 BC
Damocles*	16.99	Kid Gloves		Strider	16.99 TV
Dan Dare 3 Dark Century	16.00	Kind Words 2 Kings Quest 4	21.00	Stunt Car RacerStun Runner*	12.00
Deluxe Music Con Kit	69.99	Kings Quest Triple	26.99	Subbuteo	12.99 Bri
Deluxe Paint 3	59.99	Klaxx	13.99	Supercars	13.99
Deluxe Photolab		Knight Of The Crystallion	21.99	Swords Of Twilight	
Deluxe Print 2 Deluxe Production	80.00	Kulf Hint Book Laser Squad	12.00	Swords Of Twilight Hint Book Teenage Muntant Turtles	24.00
Deluxe Video 3	79.99	Leaderboard Birdie		Test Drive 2	10 00
Or Doom	16.99	Leisure Suit Larry 2	26.99	Test Drive 2 California Chall	
Dragons Lair 2	26.99	Leisure Suit Larry 3		Test Drive 2 Muscle Cars	9.99
Oragon Ninja		Licence To Kill		Test Drive 2 Supercars	9.99 BO
Dragon Spirit Dragons Breath		Life And Death* Light Force		The Jetsons	14.00
Oragons Lair (1 Meg)		Lombard RAC Rally	14.99	Theme Park Mystery*	
Dragons Of Flame	16.99	Loom*	16.99	The Kristal	9.99 PC
Orakken	21.99	Lords Of The Rising Sun	17.99	The Plague	16.99 ct
Dungeon Master Dungeon Master Editor	7 00	Lost Patrol		Thunderstrike*	10.00
Dungeon Master Hint Book	9.99	Manchester Utd	16.99	Toobin	
Dynamite Debugger* Dynasty Wars	16.99	Manhunter In New York	21.99	Total Eclipse	
Dynasty Wars	16.99	Manhunter Hint Book	6.99	Total REcall*	10.99
dition One	1/1 00	Manhunter In San Francisco Maniac Mansion		Tower Of Babel Tracksuit Manager	10.00
Emlyn Hughes	13.99	Microprose Soccer		Trained Assassin	13.99 Bo
Emlyn Hughes Quiz*	13.99	M1 Tank Platoon*	21.99	Triad Vol 3	19.99 Me
scape From Robot Monsters*	13.99	Midnight Resistance*	16.99	Turbo Outrun	16.99
F-16 Combat Pilot F-19 Stealth Fighter		Mid Winter New Zealand Story		TV Sports Baseball	
F-29 Retaliator		Nightbreed*		TV Sports Basketball TV Sports Football	17.00
alcon		Ninja Spirit		Typhoon Thompson	13.99 Po
Fantavision	29.99	Ninja Warriors	13.99	Twin World	16.99 Total
Falcon Mission Disk	13.99	Nitro*	16.99	UMS	
Falcon Missoin Disk 2* Farey Tale Adventure	13.99	North and South	16.99	UMS 2* UMS Scenario 1	1100
Ferrari Formula 1	16.99	Operation Harrier*Operation Stealth*	19.99	UMS Scenario 2	11 00
iahtina Soccer	16.99	Oriental Games*	16.99	Unreal*	16.99 G
inal Battle* ire And Forget 2*	16.99	Operation Thunderbolt	16.99	Untouchables	18.99 Sn
-ire And Forget 2* -ire And Brimstone*	16.99	Operation Wolf	13.00	Verminator	13.99 Sp
Flight Simulator 2	26.99	P47	15.99	Vortex Warhead	
Flight Of The Intruder*	19.99	Paperboy	12.99	Waterloo	16.99 Ph
It Disk 7 or 11	13.99	Pipemania	16.99	Wayne Gretzky Hockey	14.99 Ito
FIT Disk European	13.99	Pirates	15.99	Weird Dreams	15.99 SA
Fit Disk Japan Football Director 2	12.99	Player Manager	16.00	Wild Streets	16.99 Cc
Football Manager 2 Gift Pk	12.99	Police Quest 1, 2 Hint Book	6.99	Wings* Wings Of Fury*	1200
Fooballer Of The Year 2	13.99	Police Quest 2	16.99	World Cup soccer 90*	18.99 Sic
Full Metal Planete	16.99	Populous	16.99	Xenomorph	16.99
Fun School 2 (6-8)	11.99	Populous Promised Land	7.99	Xenon 2 Megablast	16.99
Fun School 2 (over 8)	11.99	Powerdrome	10.99	Zak McKraken	16.99

13.99 Police Quest.
12.99 Police Quest.
13.99 Police Quest 2
16.99 Populous......
11.99 Populous Pron
11.99 Powerdrome.
11.99 Powerdriff.....

FIF Disk Japan
Football Director 2....
Football Manager 2 Giff Pk.,
Fooballer Of The Year 2...
Full Metal Planete...
Fun School 2 (6-8)...
Fun School 2 (over 8)...
Fun School 2 (under 6)....

MICROSMART MEGA DEALS!!

Half Meg Upgrades

512K Upgrade inc. clock with It Came From The Desert - £54.99

512K Upgrade inc clock with Gold Of The Realm - £49.99

512K Upgrade inc clock with Dragons Lair - **£69.99**

512K Upgrade inc clock with Space Ace - £69.99

512K Upgrade inc clock with Dungeon Master - **£69.99**

512K Upgrade inc clock with Manhunter 2 - £69.99

Naksha Mouse inc mouse mat, mouse house and Deluxe Paint -£29.99

Contriver Replacement Mouse inc Deluxe Paint - £19.99

Quality Second Disk Drive - £59.99

Blank Disks Sony Unbranded with labels 69p Each.

KAO Unbranded with labels 60p Each.

* AMIGA SPECIALS *

Leaderboard	
Rocket Ranger	9.99
Marble Madness	7.50
Bards Tale 1	7.50
TV Sports Football	12.99
Galaxy Force	4.99
Brian Cloughs Football	8 99
F-18 Interceptor	0 00
Eliminator	
Fish	
Trivial Pursuits New Beginning	9.00
Calat and Caracia New Beginning	0.99
Saint and Greavsie	
Kristal	
Emmanuelle	/.99
Lords Of The Rising Sun	11.99
Batman The Movie	9.99
Fernandez Must Die	6.99
Hunt For Red October	
Pacland	6.99
Pacmania	8.99
Starglider 2	7.99
Conflict In Europe	
Joan Of Arc	
Trivial Pursuit	
Nebulus	
Cybernoid 2	4 00
Hollywood Poker Pro	7.00
Gold Of The Realm (1 Meg)	0.00
Baal	
Menace	
Ballistix	/.99
Shadow Of The Beast	16.99
Laser Squad	8.99
Passing Shot	
3 Stooges	
Tank Attack	
Seven Gates Of Jambata	
Chambers Of Shoalin	7.99
Bloodwych	9.99
Interphase	
Gauntlet 11	7.99
Spy v Spy	
Spy v Spy 2	
Spy v Spy 3	1 00
Centrefold Squares	7.00
Phobia	
Italia 90	
SAS Combat.	
Captain Blood	4.99
Barbarian Psygnosis	
Drum Studio	
Sidewinder 2	4.99

Amiga 512 items + Clock £44.99 1st ten machine orders you will get a free potable telephone voucher!

Please send orders and cheque/PO/Access/Visa No. and expiry date to: Microsmart, 125 High Street, Stony Stratford, Milton Keynes MK11 1AT.

MAIL ORDER

AMIGA MEGA DEALS!!! FREE HOLIDAY ACCOMMODATION

For two people Voucher with every Machine Purchase. Resorts available are Florida, Majorca, Malta, and Southern Spain.

AMIGA A500 BAT GAMES PACK

BAT Games Pack Includes:

- ★ Amiga A500 512K Keyboard with built in 1 Megabyte Disk Drive ★ Free TV Modulator worth £24.99 allowing you to use the Amiga with a normal TV.
- ★ DELUXE PAINT 11 GRAPHICS PACKAGE
- * FREE only just released BATMAN THE MOVIE games software

- * NEW ZEALAND STORY arcade games software.

 * F16 INTERCEPTOR amazing 3D flight simulator software.

 * FREE JOYSTICK, MOUSE MAT AND 10 BLANK DISKS.

 * 10 FREE games inc. Blasteroids, Capatin Fizz, Pacman & Space Invaders
- * AMIGA BASIC Amiga EXTRAS 1.3 Workbench 1.3 PLUS the Amiga Step by Step Tutorial
- All leads manuals PLUS MOUSE and Mainsplug!

FLIGHT OF FANTASY PACK £369

Inc VAT and Next day courier

Includes:

- *F29 Retaliator
- *Rainbow Islands
- *Deluxe Paint II
- *Escape From The Planet Of The Robot Monsters
- * Modulator
- * Power Supply Unit
- * Work Bench 1.3
- * Amiga Basic
- * Mouse

AMIGA A500 CLASS OF THE 1990'S BUSINESS + EDUCATIONAL PACK £499 inc VAT & next day courier

FEATURES:

- *Amiga A500 TV Modulator
- *Midi Interface Software
- *Kind Words 11 word processor Deluxe Paint II
- *Page Setter DTP
- *Super Base Personal
- Database
- **★**Maxplan 500 Spreadsheet
- *Amiga Logo BBC Emulator
 - **★ Mouse Mat 10 Blank Disks** and disk wallet

MONITORS

Commodore Amiga A 1084 Stereo Monitor Inc lead£269.00 Phillips CM8833 stereo colour monitor inc lead for ST or Amiga....

AMIGA 1 MEG BAT GAME PACK

£499 Inc VAT and next day courier

- 1 Meg Bat Games Pack Includes:
- Fitted 1 Megabyte Memory Expansion + Real Time Clock Card
- Everything listed for the A500 Bat Game Pack DRAGONS LAIR 1 MEG MEGAGAME!

ACCESSORIES

ı	Quickshot II Turbo Joystick	0 00
ĺ	QUICKSTOT II TUIDO JOYSTICK	0.00
١	Quickshot III Turbo Joystick	9.99
ı	Competition PRO Extra Joystick	12.99
	Speed King Autofire Joystick	9.99
1	Mouse Mats	3.99
	Contriver Replacement Mouse	19.99
п	District Contract Con	,
	(Inc Deluxe Paint, Mouse Mat & Mouse Hou	ise)
	(Inc Deluxe Paint, Mouse Mat & Mouse Hou Naksha Uparade Mouse	
	Naksha Upgrade Mouse	29.99
	Naksha Upgrade Mouse(Inc Deluxe Paint, Mouse House, Mouse Mo	29.99 at)
	Naksha Upgrade Mouse(Inc Deluxe Paint, Mouse House, Mouse Mouse Half Meg Upgrade inc clock	29.99 at) 44.99
	Naksha Upgrade Mouse(Inc Deluxe Paint, Mouse House, Mouse Mo	29.99 at) 44.99 6.99

PRINTERS

Star LC24 1024 Pin incl lead ST/Amiga	249.00
Star LC10 including lead for ST/Amiga	
Star LC10 colour including interface lead	
for ST/Amiga	219.00

MICROSMART. 125 HIGH STREET STONY STRATFORD, **MILTON KEYNES, MK11**

MICROSMART 24 HR HOTLINE 0908 564369

TITLE	COMP	PRICE	Have you ordered from us before?	YES	NO
			Name		
			Address		
	TOTAL COST £:		Tel No:		



A1500 SYSTEM **FROM ONLY £199.00**

A1500 System with A500 fitted Plus 12 months warranty£520.00 A1500 Silent Power Fan£21.50 A590 Fitting Kit for A1500.....£59.00 3.5 Floppy Drives£64.95 512K Ram Cards with Clock.....£49.95 A590 20MB Hard Drive£346.96 A590 With 2 Megabytes Ram£433.00 4 Meg Ram Card£99.00 Ram for A590 or other cards, price per Meg£60.00 Colour Monitors 1084S£216.96 Full Midi interface From£34.95 Microway Flicker Fixer£275.00 Flicker Fixer for A1500 fitted by Checkmate .. £345.00 All prices exclude Vat and Carriage

Remember Checkmate only buy Commodore products from official Distributors, giving you full UK Machines.



Phone for prices on Professional Expansion for the A1500 System, and any custom configurations you may require. Ask about other kits for different expansion cards.

Checkmate Digital Ltd 80 Mildmay Park London, N1 4PR Tel: 071-923 0658 Fax: 071-254-1655

NO ONE KNOWS THE A500 BETTER THAN CHECKMATE DIGITAL

ADVANTAGE



THE AMIGA ADVANTAGE

POPULAR PD SOFTWARE IN SPECIAL **3-DISC PACKS**

PRICES INCLUDE VAT & POSTAGE

ROLAND'S NEW DESK-TOP COMPUTER RANGE

CM -64 CM-32P



CN-20
The CN-20 Music Entry Pad facilititates the programming of basic song data on a PC. It offers, for instance, easy editing of data pre-recorded from an external keyboard in real time. Its multi-purpose fader can be assigned to control a variety of MIDI information such as Control

£129

2M-64 CM-32P

The CM-32 LA Sound Module provides all he LA capabilities of the CM-64, is 32 voice polyphonic and 9-part multi-timbral and Heewise has built-in digital reverb. The CM-64's Sound Module contains the CM-64's Sound Module contains the CM-64's and 6-part multi-timbral, has the same digital reverb, and is

VISIT OUR SHOWROOMS



ast of the modules is the CA-30 Intelligent Arranger. Designed to be linked with the CM-64 or CM 32-L, the CA-30 is a sophisticated auto arranger with similar ntelligent arranging functions as found on Roland's best-selling E-20 Intelligent inthesizer. With the CA-30, even complete beginners can create interesting and E315

ASK ABOUT OUR SPECIAL OFFERS

NEW LOW COST AMIGA-PACKS

23 compilation packs for AMIGA computers. Each contains three discs full of popular, tried and tested PD programs

- * AMIGA CLASSICS Space Invaders, PacMan, 3D-Breakout, Bally II, Wanderer, Egyptian Run, Light Cycles, Mirror Wars, Battleships, Lander.
- ★ AMIGA CHALLENGER Chess, Solitaire, Backgammon, Empire, OXO, Multi-Level TicTacToe, Picture Puzzle, Othello, Klondike, Tetrix, Monopoly, Shanghai, Five In A Line, NutHouse, Yahtzee.
- AMIGA ADVENTURES featuring Hack, Larn Dungeons & Dragons, Moira.(Moira needs IM).
- ★ FUN WITH GRAPHICS featuring Animation, Mandelbrot Pictures, CAD, Fractal Landscapes, Graphics, Raytracer, Sliding Puzzle, Life 3D.
- ★ STAR TREK Amazing new version of this cult classic. Needs two drives and 1 Meg memory. Playable demo with great graphics and sound.
- ★ THE MUSIC PACK A large collection of sound effects, new instruments for the CZ synths, MIDI utilities and songs.
- ★ SOUNDTRACKER Make your Amiga more musical with this high quality program. Includes full instructions, songs and instruments.
- ★ SONIX Three disc-fulls of tunes for the commercial Sonix program.
- * KERMIT & FRIENDS A selection of communications programs including Kermit himself.

FOUR WAYS TO BUY:-

- PHONE 0242 224 340 with your Access or Visa no.
- 2 FAX 0242 226 755
- 3 POST your cheque or P.O to 56 Bath Road, Cheltenham
- **COLLECT from our showrooms**
- UTILITIES TOOLBOX A host of useful utilities for the Amiga user. * HACKERS TOOLBOX Sector Editors, Archivers, Virus
- ★ LEARNING C A complete C compiler plus loads of
- tools and source code THE PROGRAMMERS PACK featuring Prolog, Forth,
- Modula-2, Lisp, Logo. ★ SEEING STARS A collection of fascinating Astronomy
- programs ★ WORD PROCESSING Complete WP system - Spelling
- Checker and Editor, Printer and Text Utilities
- ★ HOME & BUSINESS featuring Database, Spreadsheet, Home Accounts, Hypertext Shell, Calculator, Home Inventory
- ★ THE DEMO PACK #1 The latest top quality demo
- ★ THE DEMO PACK #2 Popular demo classics
- ★ THE DEMO PACK #3 A selection of entertaining Music
- * THE DEMO PACK #4 A further set of musical demos.
- * PICTURE SHOW #1 High quality slide-show of hi-res
- ★ PICTURE SHOW #2 More hi-res pictures to see for

ONE PACK	29.95
TWO PACKS	£15.95
THREE PACKS	£21.95
THREE PACKSOVER THREE PACKS	£7.50 each

ADVANTAGE (AF) 56 BATH ROAD CHELTENHAM GL53 7HJ. TEL 0242 224340. FAX 0242 226755.





ALL PRICES INCLUDE V.A.T. Add £3.95 For Post & Packaging Next Day Courier £9.95

Please make cheques payable to E.P.D.

CORPORATE EDUCATION & TRADE **ENQUIRIES WELCOME**

European Peripheral Distribution DEPT AF, Unit 36 Cranford Gardens Compton Acres West Bridgford Nottingham NG2 7SE

Telephone (0602) 841640

DEALS

SONY 31/2"

Double Sided 135tpi Double Density

MITSUBISHI 31/2"

Double Sided 135tpi Double Density

min 50 10 each

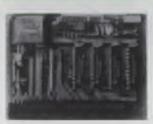
min 50

each

(Roll 1000 labels £6.95)

50 Capacity 31/2" Box	23.95
100 Capacity 31/2" Box	
90 Capacity Stackable Box£	
150 Capacity Stackable Box£	19.95

A500 512K RAM EXPANSIO



(non clock version)

(with clock)

- Gives total memory capacity of 1Mb
- Full 1 year warranty
- Disable switch
- Uses only 4 low power 256K fast Rams!!
- Plugs into trapdoor slot
- Direct replacement for A501 expansion
- Auto recharging realtime battery backed clock

500 4Mb RAM EXPANSION

- Gives a total memory capacity of 4.5Mb
- Full 1 year warranty
- No cables or soldering, fully compatible
- With fat or fatter Angus
- Fits in A501 expansion slot, auto recharging realtime battery-backed clock
- Uses industry standard 256K x 4 DRam
- 100% compatible with all Amiga software
- Requires rev 5 motherboard

Unpopulated	£99.95
512K Populated	
1Mb Populated	£149.95
1.5Mb Populated	£174.95
2Mb Populated	£199.95
2.5Mb Populated	£224.95
3Mb Populated	£249.95
3.5Mb Populated	£274.95
4Mb Populated	£299.95

A500 1.8Mb RAM EXPANSION

- Gives a total memory capacity of 2.3Mb
- Full 1 year warranty
- · Disable switch
- Uses 256K x 4 Rams
- Plugs into trapdoor slot
- When installing over 512K an internal connection to the gary chip is required
- Auto recharging battery-backed realtime clock
- Buffered data bus

Expander Board	£19.95
Unpopulated	£59.95
1/2 Meg Populated	£79.95
1 Meg Populated	£109.95
11/2 Meg Populated	£139.95
Fully Populated	£169.95



256K x 4 DRoms£29.95 per	· 1/2 meg
1.3 Rom	£29.95
Kickstart Card	£19.95
Virus Protector	£19.95
Boot Selector (boot for DFI)	

installation Professional of all boards available, we collect from you, we install the board with your configuration requirement and then deliver it back to you!

Price includes full insurance and all delivery costs!!

AMIGA New 4 Mb 68020 NOW CARD NOW £349*

 Enjoy the performance of 5.5 Amigas under the lid of your computer

* Price includes 68020 + 1Mb of ram.

- Run graphics packages at lightning speed (upto 40 times faster with 68882)
- Loads Kickstart into 32-bit SUPER-FAST RAM (software selectable!)
- Our RAM price is more cost effective than any A501 compatible (runs faster too!)
- THE 20-CARD is compatible with the A500 and the A2000
- Runs programs 5-6 times faster than a standard Amiga
- THE 20-CARD comes with 1 Mb installed (remaining 3 Mb socketed)
- THE 20-CARD operates at a FULL 16 MHz (asynchronous design)
- THE 20-CARD has a socket for the 68881/ 68882 maths coprocessor (16 MHz)
- THE 20-CARD uses low price 256x4-100ns DRAMS (has no wait states)
- THE 20-CARD has a superior DRAM design enabling it to out perform some 20 MHz cards
- THE 20-CARD is the <u>ONLY</u> card to autosychronise with the Amiga perfectly
- THE 20-CARD fits internally into the 68000 socket and is compact in design (7.75 x 5.3 inches overall dimensions)
- AFTER A WEEKS USE YOU'LL WONDER HOW ON EARTH YOU MANAGED WITHOUT IT!

ORDER FORM

payable to:-
SOLID STATE LEISURE LIMITED
Signature: Name:
Address:

Post Code:

Send to: Solid State Leisure Limited, 80 Finedon Road, Inthlingborough, Northants NN9 5TZ. Tel: (0933) 650677 - Monday to Saturday 9.30-5.30pm

Please allow up to 28 days for delivery

BACK ISSUE SERVICE

Few in stock, selling out fast

– get your copies while they last!

All issues only £3.45*, Coverdisk

and full postage included















SORRY SOLD OUT!

ISSUES 1-7



ISSUE 8
A wild shoot-em-up,
X-Out, on the disk.
The essential guide to
using the Amiga in
video inside - you too
can be a video star.



A special on the latest buzzword in computing, Multimedia, and how the Amiga is ideal for it. *Pipe Mania* provides an extremely addictive disk demo



ISSUE 10
TWO playable demos on the disk - Hammerfist and Wipe Out. Inside - a graphics special and getting down to some serious stuff with a feature on databases.



ISSUE 11
Disk and mag combine to take you on a guided tour of fractals and chaos theory.
There's a playable demo of the stunning Tower of Babel, which is just one of four Format Golds inside.



ISSUE 12
Massive Music special featuring a step-bystep guide on how to write your own tunes, plus free music tape.
Dan Dare III on Disk along with useable demo of new music program Quartet.



ISSUE 13
The glamorous story of how movies become games, plus programming languages, AMOS in full and ProDraw 2.
The Bitmaps Cadaver is a playable demo on the disk.

*UK price only Overseas prices: Europe £5 Rest of World £7 To order your back issues use the subscriptions order form opposite.

DON'T MISS OUT

OF THESE TOP THREE TITLES

F29 RETALIATOR

YOURS FREE





Take to the skies with Ocean's actionpacked combat flight sim based on the world's most advanced jet fighters.

RESOLUTION 101

YOURS FREE



Crack crime as you race around a futuristic city in your high-powered, heavily-armed ground skimmer dealing death to the local drug barons.

PIPE MANIA

YOURS FREE

Fantastic and original puzzle action game from Entertainment International lay the pipes to keep the Flooz flowing.



YOUR NO RISK GUARANTEE

You can cancel your subscription at any time and we will refund you for all unmailed issues.

FREE GAME!

WHEN YOU SUBSCRIBE TO AMIGA FORMAT

PLUS...

You guarantee yourself a regular copy of Britain's leading magazine for the Amiga, absolutely jam-packed with all the information you need to get the most out of your machine.

PLUS...

You make sure you get the tremendous Coverdisk every month, bursting with exciting programs, utilities and playable demos.

12 ISSUES OF YOUR FAVOURITE MAGAZINE
PLUS COVER DISK PLUS FREE GAME

- ALL THIS FOR ONLY £34.95!

Or, if you're a bit hard up this month...

Card No

6 ISSUES FOR JUST £17.95 (but sadly no free game)

Simply complete the coupon below and return to us ASAP

CAN'T WAIT? Then phone our CREDIT CARD HOTLINE on 0458 74011

and ask for Trevor Witt for a fast and friendly service.

YES! Please enter /	
Tiodoc citor /	renew my subscription to Amiga Format
My choice of game is (Only app	
F29 RETALIATOR	RESOLUTION 101 PIPE MANIA
Please enter my subscription	n to Amiga Format (tick as appropriate)
☐ UK (12 issues)	£34.95 UK (6 issues)£17.95
Europe (12 issues)	£59.55 Rest of World (12 issues)£84.55
To ensure you get the best	possible service all overseas subscriptions are sent Air Mail
Please also send me the foll	owing back issues (see opposite page)
8 9 10 11 12 Name Address	13 (please circle)
Name	13 (please circle) Post Code
Name Address	Post Code
Name Address	Post Code My method of payment is (tick your choice

Enclose this coupon (together with your cheque if applicable) in an envelope to:

Amiga Format Subscriptions, FREEPOST, Somerton, TA11 7BR

Ladbroke Computing International ST World Bost Doaler' 1989



Please Read: Terms Of Sale

All prices are correct at copy date, 19/07/90 and are subject to change without prior notice. All prices are accurate while stocks last. Phone for up to date prices. All prices include VAT. Delivery, in Mainland UK, is free on orders over £100 (add £10 for next day courier delivery).



Phone us, We will try to match any price. 🔼



Amiga Drives

Vortex 40Mb	£	499.99
Supra 30 Mb	£	674.99
Third Coast 65 Mb	£	659.99
Cumana 1 Mb floppy, disable	swit	ch and
through port (New slimline low	noise	model
CAX 354)	£	64.99
Cumana 1Mb 5 1/4" floppy d	rive,	disable
switch and through port, 4	0/80	track
switch(CAX 1000S).	£	129.99
Disk drive dustcover	£	2.99

A4 Flat Bed Scanner

This high quality 200dpi flat bed scanner is also a thermal printer and photocopier. It can scan high resolution images in up to 16 grey scales. Software and cable are provided for the ST or Amiga with 1Mb of memory or more. The software allows capture, printing, load and save of images in a number of formats (ST software includes image editor). Ideal for DTP, this is probably the most cost effective piece of office equipment you could own.

£449.99

Peripherals

A2000 PC-XT bridgeboard	£	558.99
A2000 PC-AT bridgeboard	£	792.99
Master sound sampler	£	34.99
2Mb RAM expansion for A500	£	539.99
Midi Master 1 in, 1 thru, 3 out	£	32.99
AMAX Mac emulator	£	124.99
128K Mac ROM's	£	phone
AMAS Sound sampler	£	91.99
Digi-view gold V3.0	£	137.99
Semi-Professional quality genlock	£	275.99
Studio quality genlock	£	793.99

Quality 3.5" Disks

	Unbranded		Sony
Quantity	Loose	Boxed	Boxed
10	£6.99	£7.99	£9.99
100	£64.99	£74.99	£89.99

All our disks are top quality Sony, Maxcell or Kao products. All disks carry an unconditional lifetime guarantee. Please add 60p p&p for each pack of ten disks.

Monitors & Tv's

Philips 8833 colour, stereo monitor. A bestselling monitor which exploits the excellent sound quality of the Amiga. £249.99

Philips 8802 colour, mono monitor £239.99

Philips 15" FST Remote, Scart input, Teletext Tv with 60 tuner presets.

Commodore 1084

An Amiga to scart cable is included with monitors & Tv monitors.

Price Beaters

Joysticks from	£4.99
Trak ball converted to work as m Amiga	nouse on £19.99
Mouse mats from	£5.99
A500 Dustcover	£3.99
Printer Dustcover	£7.99
Monitor Dustcover	£4.99
3.5" disk care kit	£5.99
80/100 disk box	£9.99

Memory Upgrade Boards

* Available with or without calendar/clock. * Plugs easily into A500 slot so no soldering. * Switch provided to switch RAM in/out. * Battery backed calendar/clock, retains time/date on switch off. * Amazing low

512K RAM Extension board	£24.99
512K RAM Extension board + clock	£34.99
512K RAM Extension board + chips	£64.99
512K RAM Extension board + clock + chips	£74.99

Our trained technicians can repair all hardware, including

Amigas, in minimum time at competitive rates.

Amiga Packs

Pack1=Batman pack, mouse, modulator	£369.99
Pack2=Batman + pack, mouse mat, joystick, Tenstar pack	£399.99
Pack3=Flight of Fantasy Pack	£379.99
Pack 4=Pack1 + 512K RAM extension	£429.99
Pack 5=Pack 1 + CM8833 Colour Monitor	£609.99
Pack 6 = Pack 4 + CM8833 Colour Monitor	£674.99.
Amiga 2000 Pack includes A2000, 1084S colour monitor	£1699.99
Phone for other combinations of hardware / softy	vare.

Quality Low Price and Professional Series Printers

Star LC-10 Best-Selling mono 9 pin	£	169.99	*	Star FR-10 mono 9 pin, 300 cps draft elite, 16 NLQ fonts	£	399.99	*
Star LC-10 2 faster version of LC-10	£	189.99	*	Star FR-15 15" carriage version of above	£	499.99	*
Star LC-10 Colour 9 pin, 7 colour printer	£	209.99	*	Star XB-24/10 24 pin SLQ, LQ, 240cps draft elite	£	499.99	*
Star LC-24/10 24 pin mono excellent quality	£	239.99	*	Star XB-24/15 15" carriage version of above	£	649.99	*
Citizen Swift 192/64cps 24 pin mono.	£	319.99	*	7 colour upgrade kit for XB-24/10 and XB-24/15	£	39.99	
Citizen 120D 9 pin mono. Lowest price	£	139.99	*	Star Laser Printer 8, 1 Mb memory, 8 resident fonts,			
Atari SLM804 Laser Printer, 90 days on site warranty	£	1099.99		8 pages per min, 300 Dpi	£	1599.99	*

* Includes Amiga Centronies cable. All Star printers include 12 months on site warranty.



Shop & Mail order premises: 33 Ormskirk Road, Preston, Lancashire, PR1 2QP Open Monday to Saturday 9:00am to 5:00pm. Dealer enquiries welcome. Ladbroke Computing International is a trading name of Walton Marketing Limited. All trade marks recognised. start faulty cars or navigate giraffe-carrying vehicles from one place to another. But how many people know a man who can tell you this and what that nasty brown mould on your begonias is? And how to fix a faulty video recorder? And why Napoleon lost the battle of Waterloo? And where to go to get the best view of the next solar eclipse? And countless other things.

The answer is, of course, your Amiga running the Magellan Expert System – yes, a bit of a trick question, I know, as an Amiga is a what and not a who. Yes, even an A3000 with a Genlock and a Hypercube 40Mhz 68030 is not a sentient being.

Specialist Subject

An expert system is a kind of simple artificial intelligence program. It takes a group of facts on a particular subject (a 'knowledge base') and makes decisions based on the things it knows about those facts. The user can ask the program a question about the subject and the program will try to deduce an answer from the information it has. If it needs more information the expert system will



work out exactly what it needs to know to solve the problem and then it will ask the user one (or more) questions in straightforward English.

The more questions that the user asks of the program, the more 'intelligent' it will get and the fewer the additional questions it will need to ask to give an answer. After a time (depending on how complicated the subject is) the user can ask a question and the expert system will give a quick and sensible answer.

A properly-designed knowledge base will give answers that are as good as a human expert on the subject, which is of course why they're called expert systems. Unlike human experts they can work 24 hours a day and will always give consistent results, they don't get tired and they don't ask for more money as they get better at their job

Logical, Captain

An expert system works by making a series of logical deductions. First it splits up the question that it's being asked into its component words. Then it searches the relevant knowledge base for any mention of those words, and finally it makes deductions about the words from al the references it has found about

CALTHE PREVIEW THE EXPERSION OF DELETE PREVIEW

Expert Systems are a form of artificial intelligence that can analyse and help solve your problems. **PAUL LYONS** looks at the Amiga's first expert.

AGELLAN 1.1.2 @1990 Emerald Intelligence	
Data Entry Window	=
TEXT entry is required	RIN.
TEXT entry is required prently the DEFICIAN 2 YMPION is UNRNOWN. The certainty of this $\simeq 6$ at is the DEFICIANCY SYMPION 2	11000
LIGHT SENSITIVITY . 8 -USE- MAY UNKNOWN	INFERENCE
MEMORY IMPAIRMENT MENTAL DEPRESSION AND CONFUSION	
HALKING AND SPEAKING DIFFICULTIES DIMINISHED REFLEX RESPONS	SE
NERVOUS DISORDERS LEARNING DISABILIT	IES
FACIAL OILYNESS SORE LIPS AND TONGUE TONGUE ART	HRITIS
LIGHT SENSITIVITY ITCHING BURNING EYES RETARDED GF	ROWTH
RED SORE TONGUE BLURRED VISION SHORTMESS OF BRE	AIH
PAIN AND HOISE SENSITIVITY NUMBNESS IN HANDS AND FEI	ET
MEMORY LOSS LEG MUSCLES(TENDER & PAINFUL) HYPERTE	
DIGESTIVE DISTURBANCES DARK TONGUE COLOR NIGHT BLINE	
Productive Protocolitical plant totales control tradity positi	'

ABOVE LEFT: A choice of different knowledge bases is offered.

ABOVE: Showing a range of symptoms, from which the expert system can deduce the cure that is needed.

"Unlike human experts, an expert system can work 24 hours a day and will always give consistent results, they don't get tired and they don't ask for more money "

them in the knowledge base. For example, the *Amiga Format* Official Editor's Coffee Fetching Assistant asks the *Amiga Format* Expert System if the Editor is likely to give him a pay rise today. The program checks its knowledge base on pay rises. It says:

The Editor gives rises if:

and also The Editor never

- 1. there's a blue moon.
- or 2. he had fun last night
- or 3. he's in a good mood
 - 4. pulls anyone good-looking.

From these facts the program deduces that facts 2 and 3 are not true and so it asks the Coffee Fetching Assistant: "Is the moon blue?" The assistant answers no and the program tells him that there's no chance of a pay rise this millennium. As the program gets more sophisticated it will give the answer quicker and with a greater certainty (like the Editor himself, in fact).

How does it Work?

Magellan comes on three disks: the main program and hard disk installation routine, half a dozen sample knowledge bases and an interface toolkit. To run the program simply

insert the main program disk and turn your Amiga on. It will run on a standard Amiga A500, but this does severely limit the size of the knowledge bases that can be created and results in some disk swapping. A second disk drive and extra memory greatly enhance the system's capacity and performance.

Diagnostics

Installing the program on a hard disk is also simple: just run the installation program, specify where you want to install the software and enter the patches that the installer gives you in your start-up sequence. Magellan will take advantage of any amount of extra memory or disk capacity added onto your Amiga. On our regular technical test machine (an Amiga A2000 with a 40Mb hard drive) even complex knowledge bases with a large number of calculations were handled with blistering speed.

All expert systems are comparatively easy to use, but where Magellan scores over other systems is that it is also very easy to program and make new knowledge bases. All stages of the program follow the Amiga user interface with multiple, resizable windows and all commands available on pull-down menus, which also adds to the simplicity of use.

Creating a Knowledge Base

For a knowledge base to be really successful there are several steps before even turning your Amiga on.

• Decide exactly what you want the knowledge base to do. Suppose you want it to be able to tell you how to fix your car when it breaks down. Exactly what do you want it to tell you about? If it's the electrics, which bits of the electrics? And in how much detail? If you want it to help you grow better begonias, do you want it to simply tell you where you're going wrong? Or how to put it right?



To create a knowledge base you must have at least a little knowledge about the subject yourself. So that Magellan can give you answers, you must first put the facts into the program. And some knowledge of the subject will probably be needed to understand the answers the program gives you. This doesn't mean that you need to be an expert. If you can find a book called 'Space-Shuttle Repairs for Beginners' or '1001 Tips for Astronautical Engineers' then all you have to do is feed the information into your Amiga and then you too can have the knowledge of a NASA scientist at your fingertips.

 Divide the information up into simple statements. Magellan works on a with an easy IF... THEN structure. Each rule has a Premise (If this happens...) and a Result (...then this is the result).

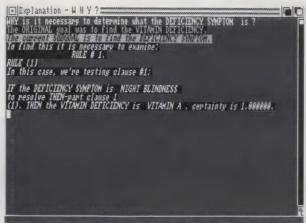
Within that the premises and results are divided into Object (the thing that this rule is about). Attribute (more information about the Object), Operator (IS, IS NOT, ARE, or ARE NOT) and Value (a property of the attribute - if the attribute is WEIGHT, then the Value is HEAVY or LIGHT).

By using such a system, Magellan simplifies the method of inputting rules and also ensures that the questions it has to ask the user are sensible. For instance in our Space-Shuttle repair expert system rule 1 might be used to tell the program that if the Shuttle is too heavy, then it won't get off the launch pad. So rule 1 would read:

	Object	Attribute	Operator	Value
IF	CARGO	WEIGHT	IS	HEAVY
THEN	SHUTTLE	DIRECTION	IS NOT	UP

Rules can be much more involved and can combine a number of rules into one. A really complex rule could say "If cargo weight is heavy and fuel load is little or engine power is low then shuttle direction is not up and crew exit is fast"

- · Type the rules into your empty knowledge base. Use the force answer option wherever possible. This means that it the program has to ask the user a question, a list of all the possible answers are presented on the screen for the user to click on with the mouse.
- Test the system. You should start by asking it simple questions that it can answer by looking at only one rule and then progress to more complex questions. After each new



ABOVE: If you ask the program why it is asking you a guestion, it will explain what part of the logical chain it is working through.

Backch

Goals

(李俊俊的音) (

Forwardd

Loop Mod

Synerg

session, having corrected mistakes, you can save the extra learning that the program has done. Each time you use it, the program will learn more about the subject of the knowledge base and become more accurate and consistent.

Extra Features

For such a fast and compact program. Magellan has an enormous range of features. There are basically three parts to making a successful knowledge base: compiling it, testing it and using it.

When compiling a knowledge base, as mentioned above, the rules can be made quite complex with up to five IF statements and five THEN statements in one rule. If the program has to ask a question of the user, it can be set to show a box with all the acceptable answers.

Each question and answer also has a threshold value. This is a probability number - 1.0 means that something is absolutely true (100% accurate), 0.5 means that has an equal chance of being either true or false (50% accurate) and 0.1 is probably untrue (only 10% accurate).

For questions that the user can't answer with absolute certainty, you can set a lower probability on the correctness of the answer. Likewise, if Magellan isn't quite sure about its answer it will tell the user exactly how close to the right answer it thinks it is. Over .8 is probably correct, below .2, it's probably wrong.

When testing a knowledge base, if the program starts giving answers

BELOW: Editing a rule so that it asks the question you need. that obviously aren't correct, then the Edit Rule (26 of 26): 35 is Enter steel basket 8.28 results

user can ask it to show all its reasoning and which rules it has used to reach its conclusion, which makes trouble-shooting much easier.

Backwards Logic

When the knowledge base is actually being used it can run in Backchaining Mode, which gives the answer to a particular question ("Who is the the president of France?"); Forwardchaining mode, which gives all the information it knows on a particular subject ("What do you know about the President of France?") or Synergistic mode, which works out the answer to the question it is asked and then goes on to forwardchain all the information it can from the answer just arrived at.

Add to this the dictionary and synonyms commands that allow the program to understand badly spelt or poorly-phrased answers and the ability to play sounds and display IFF files as part of an answer and you have an extremely powerful diagnostic and educational learning tool.

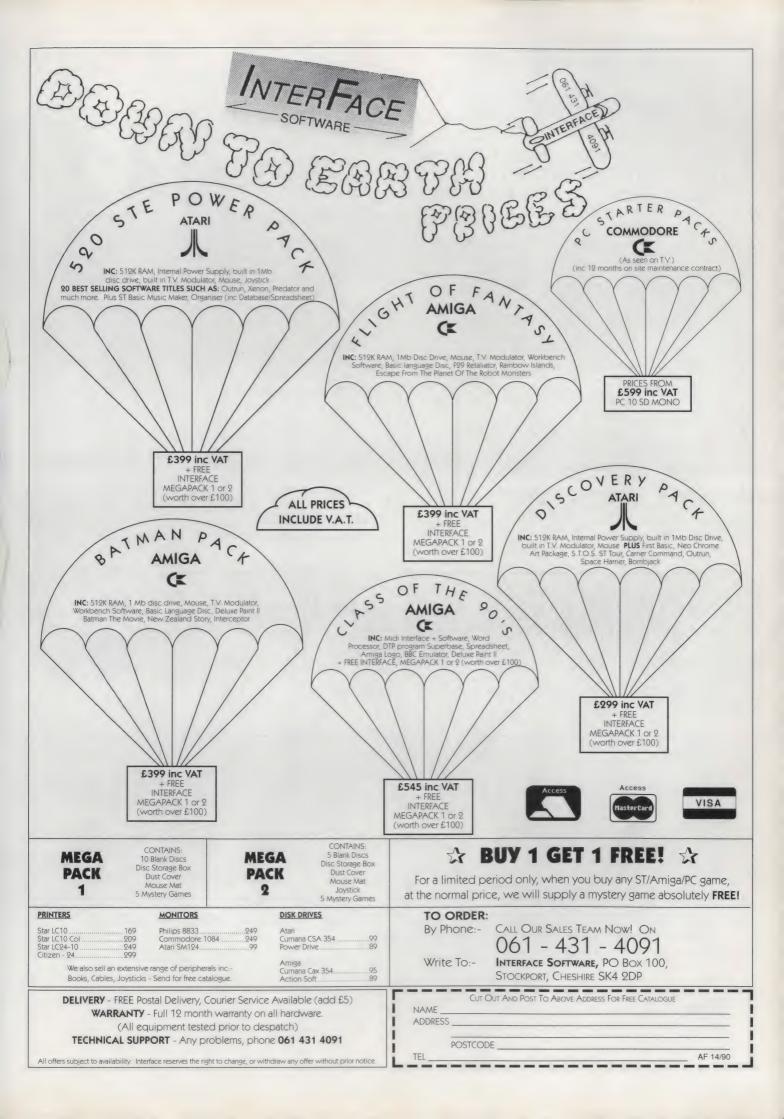
It's one thing to be told how Nelson won the Battle of Waterloo, but how much more real is the experience if the pupils can see the ships manouvering and hear the cannons roar? And how much easier is the task of training motor mechanics when the program not only says that the distributor cap is cracked, but shows a picture of the normal cap and points out likely weak spots where cracks might occur?

Magellan also comes with an interface toolkit that enables the program to draw data from other files or even from other inputs. This means that your Amiga can make weather forecasts automatically by drawing data from the instruments connected to its serial port or even dial-up news services with a modem, take in the current news and make inferences on world political opinion. The creation of such systems may sound very involved but it's not.

The creation of a powerful knowledge base is complicated and takes time, but it's not difficult. If you can write a Basic program to count to ten, then you already have enough programming skills to use Magellan. Virtually any subject that a human can be an expert on, so can Magellan.

Magellan is an incredibly powerful package, not only because of the vast range of features but also for its unrivalled speed and versatility, even on an Amiga A500. If this was available on a Macintosh, it probably couldn't be much more powerful, it certainly could cost several times the price - and it definitely would still be worth the money.

MAGELLAN All Amigas # £99.95 # **Emerald Intelligence HB Marketing 0753 686000**





HAVE YOUR OWN AMIGA GRAPHICS OR ANIMATIONS OUTPUTTED ONTO 35MM SLIDE FILM OR VIDEOTAPE

BUREAU SERVICE

Have your own Amiga graphics outputted onto 35mm slide

All resolutions except overscan and halfbrite - send for disk with safe areas and examples

Prices inc. VAT & 1st class postage in UK. (Glass mounts 30p extra per slide)

UNMOUNTED PRICE 11 - 20£3.00

Please ring to Discuss Requirements

ANIMATIONS DIRECT ONTO VIDEOTAPE Also IFF to BVU/SP VIDEOTAPE

Have your animations outputted, via broadcast quality equipment, onto most formats of videota

We can run your animation files directly onto tape

MINIMUM CHARGE - £10 (INCLUDES VAT, POSTAGE, VHS TAPE ONLY)

For the professional approach we can render IFF files frame-by-frame onto tape for true 25 frames per second animation, using specially designed Hardware and Software.

50p PER FRAME (+ WAT, POSTAGE, TAPE)

PLEASE RING TO DISCUSS YOUR REQUIREMENTS MANY EXTRAS ON REQUEST

MONEY WITH ORDER

Allow 1 week for processing and delivery We accept cheques/postal orders made payable to

ALTERNATIVE IMAGE PRODUCTIONS 6 LOTHAIR ROAD, AYLESTONE LEICESTER LE2 7QB (0533) 440041 FAX (0533) 440650

Our Incredible TOTAL

Buy directly from the manufacturer and save fiffs

With 2 years warranty

price includes the clock /date chip & rechargeable

TOTAL PRICE INCLUDING POSTAGE AND VAT

In production over 2 years with thousands sold the AMRAM512 is totally compatible with Commodores A501. Don't confuse it with inferior cut down products. Price without the clock/date circuit & battery - £36.50

TWO Years WRITTEN Warranty

Commodore A500 Flight of Fantasy pack - £355 II Memory Chips for A590 - Pack of 4 (512Kb) - £30 Answercall 300 baud modems (RS232 i/f) - £19.95 Seal'nType A500 Keyboard Protector locks out dirt & liquids, type through (no need to remove) - £10.95 Star LC10 Printer (Genuine UK Version) - £147.20 Star LC10 Ribbons - £3.20 each or 5 for £15 Amiga parallel printer lead (centronics i/f) - £5.50 Amiga to TV SCART Video/audio lead - £7.00 3.5° Disks - The Best - (U/b Sony) - PACK OF 10 - £6 Good selection of super value locking Disk Boxes

G SCKEEN RGB COLOUR DISPLAY FOR

ONLY £79 - SAE for a free brochure VAT but not postage

We take VISA, ACCESS & STYLE Credit Cards Inpholink Ltd. Front St. West, BEDLINGTON,
Northumberland NE22 5UB ~ Order Line (0670) 827480

SORRY! THE WORLD IS OUR LIN

TOP QUALITY 3.5" DS/DD DISCS AT EXPORT PRICES

ALL OUR DISCS ARE GUARANTEED

NUMBER OF DISCS ORDERED	PRICE					
GERMANY U.K. U.S.A.		\$ 64c 61c 59c	ITALY LIRE 780 740 710	\$WEDEN KRONE 3.85 3.65 3.50	SPAIN PESETA 65 62 60	
		IN B	OXES OF 50	WITHOUT LA	BELS	
50-450 500+	0.96 0.87	33p 30p	59c 53c	710 640	3.50 3.20	60 55
POSTAGE (per order)	10.00	3.50	6.00	7400	36.00	640

Outside Europe please add 20% to cover shipping costs. Payments accepted in other currencies at current exchange rate against DM. N. Croxton, 27 Jacobean Lane, Knowle, Solihull, Please note: These prices do not include any local taxes (eg V.A.T.) Prices subject to variation following changes in exchange rates etc.

Within U.K. please send orders to our agent -: West Midlands B93 9LP.

Tel: 056477 8608

Expiry_

To: GTI International Amiga Service, Zimmersmuhlenweg 73, 6370 Oberursel, West Germany. Telephone (49) 6171 73048 Fax (49) 6171 8302

į	Please send me 3.5" DS/D	D Discs in boxes of 10/50.	Method of payment :
1	NAME ADDI	RESS	Eurocheque enclosed.
1			Cash enclosed (please use registered mail!). Access/Visa/Eurocard/Mastercard/Amex/Diners (Credit Card Number
-			Cash-On-Delivery (Only available in Austria, Belgium,
i			Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland).



J. D. LEWIS REPAIRS & SPARES

<u>SPARES:</u> 68000 MPV £23.00	
68000 MPV £23.00	8364 Paula
8371 Fat Agnus £43.00	8520 £12.50
ROM £21.00	5719 Gary£15.00
8362 Denise £22.00	Service Manual\$22.00

ACCESSORIES:

KAO bulk disks **£6.50** (for 10)

A500 fixed price repair (excluding disk drive and PSU) £40.00

All Datel products available. (Contact for prices) 42, Harcourt Avenue, Meir, Stoke-on-Trent, ST3 5LX. Or Telephone: 0782 323348 * All prices subject to availability

* * * SPECIAL OFFERS * * *

A500 FLIGHT OF FANTASY PACK only £363.99 A500 CLASS OF THE 90'S PACK only £535.60 AMIGA 2000 only £1147.

(Some extra discount prices still available for a limited period - please ask!) Printers, Ribbons & Discs also available. Specialised cables made to order.

AMIGA TITLES

Carrier Command	£14.99	Italy 1990	£16.25
Damocles	£16.25	Music 'X'	£75.00
Elite	£14.99	Microprose Soccer	£14.99
Flimbo's Quest	£16.25	Rainbow Islands	£16.25
Graphics Starter Kit	£45.99	Rotox	£16.25
Gunship	£14.99	Shadow Warrior	£16.25
(1	Full discount price	e lists on request)	

IMPEX-ILKESTON - MAIL ORDER

65 Sudbury Avenue, Ilkeston, Derbys'., DE7 5EA. Tel: 0602 321330 (before 8pm Mon-Sat)

...£39.95 .£159.95 .£193.50 ...£47.75 ...£27.50 ...£57.50

ALL PRICES ARE INCLUSIVE, P&P FREE IN UK ON ORDERS OVER £10. All items subject to availability, despatched within 24 hours of cleared payment.

Cheques to be made payable to IMPEX-ILKESTON.

AMIGA HARDWARE/PERIPHERALS/BOOKS

A500 FLIGHT OF FANTAS
F29 Retaliator
Rainbow Islands
Escape from the Planet of
the Robot Monsters
Deluxe Paint II
£374.99

A500 BATMAN PACK

Batman - The Movie New Zealand Story Interceptor Deluxe Paint II £374.99

A 500 CLASS OF THE 90'S

Superbase Personal Maxiplan 500 Publishers Choice Dr T's Midi Recording Studio Amiga Logo
BBC Emulator
Deluxe Paint II
Midi Interface
10 Discs + Disc Wallet
Mouse Mat
£524.99

AMIGA B2000 SYSTEMS

Latest revision UK B2000's available singly or bundled with 20/40 Mb Hard drives and/or PC - XT/AT Bridgeboards. Please call for latest prices

SOFTMACHINE STARTER PACK

Deluxe Mouse Mat Quality Dust Cover Drive Head CLEANER 10 TDK MF2DD Disks ONLY £20*

A590 20Mb Hard Drive	
A501 Ram Exp/Clock A520 Modulator	£94.98
1084S Colour Monitor	£259 90
A1352 Mouse	£34.99
Phillips 8833 Monitor	£254.99
Star LC-10 Star LC-10 Colour	.£169.99
Star LC-10 Colour	£214.99
Star LC-24 10	£249.99
Cumana 1Mb 3.5" Drive.	£69.95
Cumana 5.25" Drive 0.5 Mb Ram Exp/Clock	
Hitachi Camera + lens	C210.00
Digiviou 4	£124 QC
Digiview 4 Vidi Amiga	£97.50
Colournic	£434 90
Type 10 Handy Scanner.	£254.99
Minigen	£97.50
Rendale 8802 Genlock	£187.50
Rendale 8806 Genlock	
Cherry A3 Tablet	£459.99
Demon II Modem	£94.99
Designer Modem	
Pro IV Modem	£389.99
Linnet Modem	
Linnet 1200 Modem	
Linnet 2400 Modem	£359.99
Midi Master Interface	£29.99
Omega Midi Interface	670.00
Futuresound	£74 QC
Mastersound	£34 QC
Perfect Sound	£67.50
Contriver Mouse	£24 90
Optical Mouse	
A1500 base case	£204.99
A1500 base case 10 x Sony Bulk 3.5"	£8.99
10 x Sony MFD2 DD	£12.99
10 " TOK MEODO O ET	040.00

084S Colour Monitor £259.99 A1352 Mouse £234.99 Phillips 8833 Monitor £254.99 Star LC-10 £169.99 Star LC-24 10 £244.99 Star LC-24 10 £249.99 Cumana 1Mb 3.5" Drive £69.99 Cumana 5.25" Drive £119.99 0.5 Mb Ram Exp/Clock £59.99	*3D Graph Prog Basic £18.45 Amiga Applications £16.95 *Assem Lang Prog £14.45 Amiga Basic Inside & Out £18.95 Amiga C for Adv. Prog £22.45 Amiga Dos £14.95 Amiga Dos £14.95 Amiga Dos £14.845 Amiga Dos Quick Ref £8.95 Amiga Dos Quick Ref £8.95	Excellence. Kind Words 2. Pen Pal Protext Pro Write V.3 Scribble Platinum Transcript Word Perfect	
Hitachi Camera + Iens £219.99 Digiview 4 £124.99 Vidi Amiga £97.50 Colourpic £434.99 Type 10 Handy Scanner £254.99 Minigen £97.50 Rendale 8802 Genlock £187.50	Amiga DOS Ref. Gde£14.95 Amiga Desktop Video£18.45 Amiga Desktop Video Gde £18.45 * Disk Drives Inside & Out .£27.95 Amiga for Beginners£12.95 * Gde Gra/Sound/Comm£17.45	Acquisition 1.3 K-Data K-Data Prodata Superbase Personal Superbase Personal 2 Superbase Professional	
Rendale 8806 Genlock	Amiga Gra. Inside & Out. £32.45 "Hardware Ref. Man. £21.95 Amiga Mach. Lang. Guide £21.95 Amiga Machine Lang. £14.95 "Microsoft Bas. Prog. Gde.£18.45 "Prog. Handbook Vol. 1 . £23.95 "Prog. Handbook Vol. 2 . £23.95	SPREADSHEE Advantage DG Calc K-Spread 2 Spread 2	
Linnet 2400 Modem. £359.99 Midi Master Interface £29.99 Omega Midi Interface £29.99 A.M.A.S. £79.99 Futuresound £74.99 Mastersound. £34.99 Perfect Sound. £67.50 Contriver Mouse £24.99 Optical Mouse £34.99 10 x Sony Bulk 3.5" £8.99 10 x Sony Bulk 3.5" £8.99 10 x TDK MF2DD 3.5" £12.99 10 x TDK MF2DD 3.5" £12.99 3.5" 40 Cap Lockable Box £7.99 3.5" 150 Cap Lockable Box £19.99	Amiga Prog Gde Computes£17.45 Amiga Prog. Gde Weber£18.45 * ROM Kernel Ref Man Inc£28.95 * ROM Kernel Ref Man Lib. £32.95 Amiga Sys Prog Guide £32.95 Amiga Tricks and Tips £14.95 Becoming an Amiga Artist .£18.45 Beginners guide to Amiga .£16.95 Computes 1st Book of * £16.95 Computes 2nd Book of * £16.95 Elementary Amiga Basic .£14.95 Inside Amiga Graphics £14.95 Inside Amiga Graphics £16.95 Kids & the Amiga £15.95 Mapping the Amiga £23.95 Prog Guide to Amiga £23.95	LANGUAGES/ COMPILER AMOS A-Rexx Argasm. Aztec C Developer Aztec C Professional Benchmark Modula 2 Benchmark Libraries Devpac 2 Enhancer (WB 1.3) GFA Basic V3 Compiler GFA Basic V3 Interpreter Hisoft Basic Hisoft Extend K-Seka Assembler Lattice C V5	3.

WORD PROCESSING

DATABACEC		
Nord Perfect	£176.95	
Franscript	£32.50	
Scribble Platinum		
Pro Write V.3		
Protext	£69.95	
Pen Pal	£104.95	
Kind Words 2		
Excellence	£136.95	

DATABASES		
cquisition 1.3Datarodatauperbase Personaluperbase Personal 2uperbase Professional	£34.95 £56.95 £42.50 £69.95	

SPREADSHEETS	
Advantage DG Calc K-Spread 2 Superplan	£27.95 £42.50
LANGUAGES/ COMPILERS/ ETC	

A-Rexx	£32.5
Argasm	£49.5
Aztec C Developer	
Aztec C Professional	£112.
Benchmark Modula 2	£137.5
Benchmark Libraries	£72.5
Devpac 2	£43.5
Enhancer (WB 1.3)	
GFA Basic V3 Compiler	£22.9
GFA Basic V3 Interpreter	£39.9
Hisoft Basic	£56.9
Hisoft Extend	£15.9
K-Seka Assembler	£34.9
Latting C VE	01740

SOFTWARE

UTILIITES	
B.A.D. Emulator Calligrapher Cross Dos. Gomf V3. Hisoft Extend Interchange Mac 2 Dos. Mailshot Plus Masterpiece Fonts Power Windows V2.5 Project D	£32.50 £39.95 £67.95 £24.95 £27.95 £15.75 £39.95 £69.95 £34.95 £137.50 £54.95 £32.50
Quarterback	£41.95
Ultra Card PlusX-Copy	
X-Copy + Hardware	

CAD/GRAPH	ICS/ANIMATION
Animania	000.05

Allimagiv	.404.	
Architectural Design	£22.	5
Can do	2101.	9
C-Light	£39.	9
Comic Setter	£39.	9
Comic Setter Clip Art	£17.	5
Deluxe Paint III	£59.	9
Deluxe Photolab		
Deluxe Print II	£36.	9
Deluxe Video III	£59.	9
Design 3D	£62.	9
Digi Paint 3	£54.	9
Digimate 3 (needs A-Rexx)	£33.	9
Fantavision		
Future Design	£22.	5
Human Design	£22.	5
Interior Design	£22.	5
ntroCAD	\$47.	5
Microbot Design	£22.	5
Movie Setter	£39.	9
Page Flipper + F/X	269	

£104.95 .£54.95 .£85.95 .£54.95 .£86.95 .£74.95 *state Sculpt or Videos **DESK TOP PUBLISHING**

Professional Draw V.2.
Pro Video Plus.
The Director.
The Director's Toolkit.
TV Show V.2.
TV Text Prof.
Video Generic Master.
Video Titler.
Video Wipe Master.

Video Wipe Master X-CAD Designer....

Home Office Kit	£116.95
Pagesetter V2	£77.95
Pagestream (USA)	£127.95
Professional Page	£193.50
PP Compugraphic fonts	£112.50
PP Structured Clip Art	£35.95
PP Templates	£35.95

Music

A Drum	£32.50
Bars and Pipes	£184.95
Deluxe Music	£54.95
Instant Music	£19.95
Music X	£184.95
Quartet	£34.95
Sonix	
Track 24	£74.95

COMMUNICATIONS

Cashbook Combo..... Cashbook Controller. Cashbook Controller £34.95 Desktop Budget £32.50 Final Accounts £21.95 Home Accounts £21.50 Personal Accounts Plus £24.95 Small Business Acc Cash £56.50 Small Business Acc Plus £156.50 Small Business Acc Plus £156.50

Please make cheques/postal orders payable to SOFTMACHINE. All items subject to availability All prices include V.A.T. & Delivery. All prices subject to change without notice. E.&O.E. SOFTMACHINE

Dept. AMF 9, 36 Guernsey Road, Sunderland SR4 9RR. Telephone: 091 385 7426

Please ring for prices/availability on any hardware/software/peripherals not listed. (Full price list on request)

AT Bridge Board Turbo 68020, 68030



Monitors Multi-Sync, 1084

0705 511439

The only source call us last!

Hard Drives SCSI 20...300Mb



Star Printers LC10... XB24-15

BAT + much more

Athene Computers, 16 Stoke Rd, Gosport, Star Gold Dealer, Hants. PO12 1JB

Buy direct from the Manufacturers Highest quality, lowest price

A500 1/2 MEG RAM Expansion A500 1.5 **MEG** RAM Expansion





BOTH WITH BATTERY BACKED CLOCK ON/OFF SWITCH & HIGH SPEED D.RAMS

Cheques to RAMTEK P.O. Box 94, Oldham, OL4 45X

Tel: 061 627 2044

24 Hr Credit Card Hotline

WORLDWIDE SOFTWARE 106A Chilwell Road, Beeston Nottingham NG9 1ES

WERLDWIDE ·SOFTWARE

Commodore Amiga Software

Summertime **Special Offer**

£1.00 off all Amiga titles

Just tell us in which magazine you saw our advert then deduct

Commodore

	_
£17.75	1
£14.95	1
£17.95	٦
£17.95	-
£17.95	
£14.95	1
	7
£17.95	7
£22.95	-
£17.95	
£22.95	1
£17.95	1
£17.95	l
£17.95	
£16.95	l
C14.05	l
£14.95	l
£17.95	

Rainbow Islands
Red Lightning
Resolution 101 ...
Rings of Medusa
Robocop
Rorkes Drift

SOFTWARE 106A Chilwell Road, Beeston Nottingham NG9 1ES

WORLDWIDE

ı	Amiga Software	
ı		
ı	688 Sub Attack	£17.95
ı	A.M.O.S	£39.95
ı	Adidas Champ Football	£17 95
1	All Dogs Go To Heaven	£17.95
ı	All Time Favourites	£22.95
ı	Anarchy	£14.95
ı	Ant Heads Data Disk	£14.99
ı	Back to Future 2	£17.95
ı	Bards Tale 2	£17.95
ı	Bards Tale	£7 25
ı	Batman the Movie	£17.95
ı	Battlehawks 1942	£17.95
ı	Battlemaster	£22 95
ı	Betrayal	£16.95
ı	Blade Warrior	£17.95
ı	Bomber Mission Disk	£14 95
ı	Bomber	£22 95
ı	Boxing Manager	£14 95
ı	Breach 2	£17.95
ı	Breach 2	€14 95
1	Castle Master	617 95
ı	Champions of Krynn 1 med	£22 95
ı	Champions of Krynn 1 meg Chase HQ	£17.95
ı	Chass Champion 2175	£22 95
ı	Cloud Kingdoms	£17.95
ı	Codename Iceman	£26.95
ı	Colorado	£17 95
ı	Combo Racer	£17.95
ı	Conflict in Europe	£17.95
ı	Conflict	£4.99
ı	Crackdown	£17.95
ı	Damocles	£16.95
ı	Dan Dare 3	£14.95
ı	De Luxe Scrabble	£14.95
1	Defenders of the Earth	£17.95
ı	Double Dragon 2	£14.95
ı	Dragon Flight	£22 95
ı	Dragon Force 1 meg	£22.95
1	Dragon Force 1 meg	£22.95
1	Dragons Of Flame	۶17.95
ı	Dungeon Master 1 meg	£17 95
ı	Dungeon Master Editor Dynamic Debugger	£7.99
ı	Dynamic Debugger	£17.95
ı	Dynasty Wars	.£17.95
ı	Dyter 7	£14.95
9	F Motion	£17 95
1	Edition One	£17.95
J	Elite	£16.95
1	Emlyn Hughes Soccer	£17.95
J	Escape Planet of Robot Monsters	£14.95
ı	Escape Singes Castle	£32.95
J	Everton FC Intelligensia	£14 95
1	F16 Combat Pilot F16 Falcon Mission Disk	£16.95
J	F16 Falcon Mission Disk	£14.95

Commodore Amiga Software Falcon Mission 2
Ferrari Formula One
Finest Hour Battle of Britain
Fire and Brimstone
Fire and Forget 2
Fire Brigade 1 meg
Fight of Intuder od.
Sim 2 Scene Disk Europe
Sim 2 Scene Disk Hawaii
Sim 2 Scene Disk Hawaii
Sim 2 Scene Disk Japan
Sim 2 Scenery Disk 7
Sim 2 Scenery Disk 9
Sim 2 Scenery Disk 10
Scenery Dis BY PHONE

£1.00 from each title that you order Fast Delivery On All Stock Items By 1st Class Mail In UK.
Special Overseas Service By Air Mail Worldwide.
Credit Card Orders Accepted by Phone Or Mail.

BY PHONE

and .. Turtles

TO VISA 02 225368

0602 252113 (24 Hours)	Special Overseas Service By Air Mail Worldwide. Credit Card Orders Accepted by Phone Or Mail. Overseas tel no: Nottingham 225368 Credit Card Order Telephone Lines			
un School 2 (under 6)	£14.95	Knights of Crystallion	£22.95	Sim City
hosts 'n' Goblins	£14.95	Last Ninja 2	£17.95	Sir Fred
irand Prix Circuit	£17.95	Leisuresuit Larry 3	£29.99	Sly Spy Secret Agent
lardball 2	£17.95	Leisuresuit Larry	£17.95	Snowstrike
larley Davidson	£22.95	Life and Death		Space Ace
leavy Metal	£17.95	Lost Patrol	£17.95	Spell Book 4-9 years
leroes Compilation	£22.95	Manchester United	£17.95	Spidertronic
leroes Quest 1 Meg	£26.95	Maniac Mansion	£17.95	Star Command
lunter Killer	£4.99	Matrix Marauders	£14.95	Starblade
ari Warriors		Midnight Resistance	£17.95	Starflight
npossamole	£14.95	Midwinter		Storm Across Europe
mperium	£17.95	Might and Magic 2	£22.95	Stunt Car Racer
ndy Last Crusade Adv	£17.95	Mindroll Quedex	£14.95	Supercars (Gremlin)
nfestation	£16.95	Necronom	£17.95	Supreme Flight Comma
nternat 3D Tennis	£17.95	Ninja Spirit	£17.95	Sword of Aragon
Came from the Desert (1 meg)	£21.95	Ninja Warriors	£14.95	Swords of Twilight
alia 1990		Nitro Boost	£4.99	Teenage Mutant Ninja 1
/anhoe		Nitro	£14.95	Tennis Cup
ack Nicklaus Golf	£16.95	North and South	£16.95	Test Drive 2 California (
ump Jet		Operation Thunderbolt		Test Drive 2 Europe Ch
lick Off 2 + World Cup 90	£17.95	P47 Thunderbolt	£16.95	Test Drive 2 Musclecars
ick Off 2	£14.95	Pinball Magic	£17.95	Test Drive 2 Supercars
ick Off Extra Time	£7.99	Pipe Mania	£16.95	Test Drive 2 The Duel
id Gloves		Pirates	£17.95	The Cycles
lings Quest 4	£26.95	Player Manager		The Keep
lings Quest Triple Pack	£26.95	Police Quest 2 (1 meg)	£28.95	The Plague
lax	£14.95	Populous Promised Lands	£7.99	Theme Park Mystery

3000	No.
	Xei
£21.95	Zoi
£17.95	**
£17.95	512
£17.95	10
£34.95	20
£14.95	30
£4.99	40
£22.95	50
£17.95	
£17.95	**
£22.95	Loc
£16.95	40
£14.95	80
£22.95	10
£22.95	***
£17.05	Jo
£29.99	Cri
£17.95	Qu
£11.20	
£11.99	Qu
£11.20	Qu
£11.20	Qu
£17.95	Qu
£17.95	Sp
£17.95	Zip
£17.95	Co
£17.95	

Commodore Amiga Software Triad Vol 3
Furrican
Furr It
Furrican
F Wings Wipe Out World Cup Soccer 90 ... World Cup Year 90 Compilation X-Out nomorph..... non 2 Megablast uiser...
uiser...
uiser...
uisey 2 Turbo
uickjoy 2 Pilot
uickjoy Supercharger
uickshot Deluxe Digital
uickshot Turbo
ueedking Autofire
o Stick Autofire
mpetition Pro...

Europe (other than UK) shipping costs are: £1.50 per disc for normal airmai £2.50 per disc for express airmai

Please make cheques or postal orders payable to WORLDWIDE SOFTWARE All prices include postage and packing in the UK ADVERTISED PRICES ARE FOR MAIL AND TELEPHONE ORDERS FAX NO: 0602 430477

Outside Europe shipping costs are £2.00 per disc for normal airmail £3.00 per disc for express airmail



by providing the artwork for their new game Spindizzy II. The winner will see their illustration on every single copy of the game sold, and who knows it might even turn into a career - an opportunity no real budding artist should miss.

On this page you'll find a description of the game, screenshots of one of the 8-bit versions and an example of what the packaging looked like on the original, so that you've got an idea of what is required.

The time limit is quite a tight one because Electric Dreams obviously need the artwork early enough to get the finished game out, so make sure your entries are in by September 3rd. The lucky winner will get everlasting fame plus a Revel airbrush kit, T-shirt, mug, watch and a copy of the game. 10 runners-up will also get a game.

Your entries should be illustrations in 'conventional' media, ie painted and not computer generated. Don't put the logo on either as this will be added at a later stage. Other than that you have a totally free hand in what the illustration is - obviously it needs to reflect the game itself, though.

THE GAME

One of the most inspired creations on the 8-bit computers was a game called Spindizzy from Electric Dreams, written by Paul Shirley. This classic game has never made its way onto the Amiga - until now.

The basic idea behind the game remains the same, but it's now much bigger and with a whole new batch of puzzles to solve. So what's so special about this 'old' game then? Simply that it has some of the most addictive and rewarding gameplay on the planet.

the packaging of

Electric Dreams'

amazing new game

Spindizzy II

You control a spinning top that has to explore a vast geometric landscape in search of jewels to collect against the clock. That arcade challenge is balanced by the fact that nearly all the jewels can only be reached by solving puzzles involving floor switches, lifts, ramps, disappearing tiles, trampolines and so on. Many a happy hour can be spent working out which floor tile needs to be activated to create a route to a jewel.

Along the way there are many dangers, most of which involve flying off into thin air or plunging down into watery depths. To conquer them all you need excellent control over the highly responsive top and a healthy dose of mental dexterity too.

HOW TO ENTER

Send your completed illustration to Spindizzy II Comp, Amiga Format, 30 Monmouth Street, Bath BA1 2BW. The entries should reach us by September 3rd and don't forget to include your name, address and phone number.

We will pass them all on to Electric Dreams for judging and will be printing as many of the entries as possible. So get those entries in, fame awaits.

RULES

Employees of Future Publishing and Activision are not allowed to enter. The judges' decision is final. No correspondence will be entered into.

OVEREIGN

93 COTSWOLD AVE DUSTON NORTHAMPTON NN5 6DP







GREYFRIARS BUS STATION LADY'S LANE **NORTHAMPTON** NN1 3BZ

ORDER BY TELEPHONE: 0604 756951 - 7am - 7pm 7 days a week

MAGNUM 4
Batman Crusader,
Afterburner,
Double Dragon,
Operation Wolf
£19.95

WORLD CUP

Kick Off, Int. Soccer

Tracksuit

£15.95

FLIGHT COMMAND Sky Chase, Strike Force Harrier £18.95

PRECIOUS METAL
Crazy Cars,
Arkanoid,
Captain Blood,
Xenon
CAE OF

PRECIOUS MEIAL
Crazy Cars,
Arkanoid,
Captain Blood,
Xenon
£15.95

_	-	_	_	
110	1/		DC	
MU	v	ы	K)	

TOP 30 MOV	EKS
688 Submarine Sim	£16.9
Balance Of Power 1990	£16.9
Cabal	£15.9
Chaos Strikes Back	£16.9
Conqueror	£15.9
Cyber-Ball	£14.9
Double Dragon II	£13.9
Drakken	
Dungeon Master	£16.9
F16 Falcon	£16.9
F29 Retaliator	£15.9
Fighter Bomber	£20.9
Ghouls 'n' Ghosts	£16.9
Indy Jones Graphic	£16.9
Italy 1990	
It Came From The Desert	£20.9

A PB	£12.0E
A PB	D13.93
Adidas Golden Shoe	£10.95
	£15.95
Aitered Beast	£15.95
American Ice Hockey	£16.95
Austerlitz	£16.95
Battle Chess	£16.95
Beach Volley	£15.95
Beyond Dark Castle	£15.95
Black Tiger	£15.95
Bloodwych	£15.95
Champions Of Krynn	
Chambers of Shaolin	
Chase HQ	
Damocles	£16.95
Double Dragon II	£13.05
Dragon Ninja	
Elite	£15.95
F19 Stealth Fighter	
	£16.95
Flood	£15.95
Future Wars	£16.95
Gazza's Super Soccer	£15.95
Ghostbusters II	
Gravity	£15.95

Please make cheques & p	ostal orders payable to
SOVEREIGN	SOFTWARE

Gravity		free storage box	
Action Service	£3.95	Espionage	
Archipelagos	£6.95	Eliminator	£6.95
Baal	£10.95	F18 Interceptor	£4.95
Bad Company		Fast Lane	£9.95
Barbarian II	£9.95	Galaxy Force	£10.95
Batman The Movie	€9.95	G'nius	£5.95
Blasteroids	£9.95	Kick Off	
Bloodmoney	£11.95	Kick Off Extra Time	£6.95

£3	95 Espionage
£6.	95 Eliminator
£10	95 F18 Interceptor
£10	95 Fast Lane
£9	95 Galaxy Force
£9	.95 G'nius
£9	.95 Kick Off
£11.	95 Kick Off Extra Time
£6	.95 Laser Squad
£9	95 New Zealand Story
£10	95 Operation Neptune
£9	95 Passing Shot
£9	

	SMASH HIT		
	unship £16.95	5 Ninja Spirit	£16.9
	ard Drivin' £13.95		£16.95
	eavy Metal £16.95		£16.95
	ound Of Shadow£16.95		£16.95
	on Lord £15.95		£15.95
	ternational 3D Tennis£16.95		£16.95
a	ck Niklaus Golf£16.95		£15.95
	ck Off II £14.9		£20.9
	est Ninja II. £16.95		£19.9
	ost Patrol £16.9		£16.9
	verpool £13.9		
	ombard RAC Rally£16.9		
	lanchester United £16.9		
	laniac Mansion £15.9		
	dilige monatori	Theme Park Mystery	£16.9
i		Turbo Outrun	£15.9
ı	21/4" DICCC	Twin World	
ı	31/2" DISCS 2 for 1 Lifetime guarantee	Ultima IV	
ı		Uninvited	£15.9
ı	10 x 3.5 DD Disks£7.95	Untouchables	£15.9
ı	20 x 3.5 DD Disks£14.95	Weird Dreams	
ı	50 x 3.5 DD Disks +	Xenomorph	£16.9
ı		Xenon II	£14.9
ı	free storage box£37.00	Zak Mckracken	
ı	100 x 3.5 DD Disks +	Zork Zero	
	200.00		

ALL GAMES SUBJECT

TO AVAILABILITY

,		
5	Rocket Ranger	£12.95
5	Safarı Guns	
5	Sargon III	£6.95
5	Shufflepuck Cafe	£9.95
5	Skidoo	£9.95
5	Soldier 2000	
5	Star Blaze	£10.95
5	Star Glider II	£12.95
5	Star Ray	£7.95
5	Stir Crazy (featuring BoBo)	£9.95
5	Take Em Out	£9.95
5	Tin Tin On The Moon	£10.95
5	Toobin	£11.95

TRIAD VOL III	
Bloodmoney,	
Speedball	
Rocket	
Ranger	

£19.95

LIGHT FORCE Voyager, R-Type, Bio Challenge £15.95

COLLECTION Netherworld, £17.95

Hostages, Kult. Purple Saturn £16.95

TOP 30 MOVERS

	,
Ivanhoe	£15.95
Midwinter	£19.95
Ninja Warrior	£13.95
Operation Thunderbolt.	£15.95
Player Manager	£14.95
Pro Tennis Tour	£15.95
Shadow Of The Beast	£17.85
Sherman M4	£16.95
Space Ace	£26.95
Space Quest III	£23.95
T.V. Sports Basketball	£19.95
Their Finest Hour	£20.95
U.M.S. II	
Ultimate Golf	£16.95
Warhead	£16.95

GA A500 POWER PACK

- Latest uprated high current power supply
- 100% extra power for external disc drives
- Crowbar cut-out short circuit protection
- Direct replacement for existing power pack
- State of the art switch mode technology
- 12 month warranty
- In stock now!



Price includes VAT and post and packing

Tel: 0582 491949

Send order with payment to:

WTS ELECTRONICS LTD, Chaul End Lane, Luton, Beds LU4 8EZ



Being able to use a variety of control systems is one of the beauties of the Amiga. The fluid control of the mouse is useful for menuing systems and design work, whereas the joysick has the ultimate speedy response required in a video game. But what if you need to use both rather frequently, but don't want to keep swapping them over all the time? Gravis may have the answer in the shape of the MouseStick.

DOUBLE OR QUITS

The MouseStick claims to be a replacement control device which can function as a standard joystick AND a mouse. The stick itself is an analogue device (like a mouse) which is equipped with two base-mounted buttons, a 'thumb' button on the top of the stick, a 'sensitivity adjuster' and three roll-switches to designate the buttons' functions.

The three buttons can be set (via the switches) to act as either the left or right mouse button – the left button being the normal joystick fire button. The sensitivity adjuster is a large wheel set in the base of the stick. This allows you to alter the 'feel' of the stick – from a 'loose' action (useful for when the stick is in mouse mode) to a tight, sprung action, which will make the stick act as a self-centring joystick.

TECHNO-BLOCK

So that's the stick itself, but what's that big block hanging off the back of it? Well this is the GMPU (Gravis MouseStick Processing Unit), which is basically a 16K computer which holds all the information on how the MouseStick should act. The GMPU can be programmed via a series of editing 'menus' which are displayed on a two-line liquid crystal display. These allow the user to alter a whole host of settings as well as switching between mouse and joystick mode.

STICK PROGRAMMING

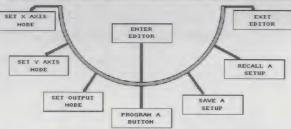
The editor is constructed as 'layers' of options, accessed by holding the stick in a certain direction so that the section you want is displayed on the panel. These include setting the centre position, the input and output resolutions (to determine how far the pointer moves across the screen when the stick is moved), locking movement to certain axes, setting up an autofire rate for the buttons and designating areas for when the joystich has no effect on the pointer (so that it doesn't wobble around when you don't want it to).

When you have designed a particularly complicated setup, you may want to store it so that you don't have to go through the laborious process of wading through the option screens every time you boot up. By entering

MUTANT REVIEW NO. 10 CO. 10 CO

Is your mouse about to utter its last squeak? Have your joystick's switches seen better days? Then pay heed! **MAFF EVANS** checks out a single alternative to both systems.





the Save Setup and Recall Setup menus, you can actually store up to three pre-defined settings thus saving a lot of time and effort.

MEASURING STICK

So how much of a breakthrough is this remarkable device? Well, having a joystick and a mouse in one basic unit seems a rather good idea. The ability to design and save various configurations means that you can tailor the stick to suit your own needs. But the real crunch comes in how the stick itself actually performs.

TOP: The MouseStick.

ABOVE: An example of the MouseStick's menu configuration, showing the first level of the editor in operation. In testing, the stick unfortunately failed to impress many people around the *Format* office. In Joystick mode, the travel was found to be a mite too wobbly, giving little feeling of stability when playing frantic arcade games. It's most annoying trying to trap and turn the ball in a game of *Kick Off* when you have to wrench the joystick such a long way that the ball flies off in the opposite direction to which you intended it to move.

As a mouse, the stick turned out to be somewhat infuriating. Moving a mouse or a trackball to a particular spot is easy and straightforward, but finding the exact spot by moving a loose, analogue joystick tends to be a shade unwieldy.

The stick tends to fall to the side when you let go, so that the pointer drifts off target – unless the sensitivity setting is tightened, which means that the pointer flies back to the centre of the screen. Not too much fun if you want to type things in as well as using a pointer.

The idea behind the MouseStick is a good one, but the performance of the device failed to live up to our great expectations.

Hopefully, though, Gravis will still persevere with the concept and release a further MouseStick with a different feel, to allow users with various preferences to get the most from this innovative system.

GRAVIS MOUSESTICK All Amigas, £69.95 Advanced Gravis (via Chris Steavenson) 0959 64641

MEDIA DIRECT

NOW INCORPORATING

TO OFFER YOU A HIGH QUALITY SERVICE AND PRODUCT RANGE



COMPUTER

COMPETITION PRO JOYSTICKS

IN YOUR FAVOURITE TEAMS

WORLD CUP SERIES

England	£12.95
Brazil	
Italy	£12.95
Spain	£12.95
Belgium	
Holland	£12.95
Sweden	
West Germany	£12.95
USA	£12.95
Scotland	£12.95

5 1/4" DSDD DISKS

25	£7.50
50	
75	£21.00
100	£26.50
500	£130.00
1000	£249.00

5 1/4" DSHD DISKS

25	£15.50
50	
75	£44.50
100	
500	£275.00
1000	£530.00

3 1/2" HIGH DENSITY DISKS £1.00 EACH

3/2

DSDD DISKS

100% CERTIFIED ERROR FREE

PRICE INCLUDES VAT & LABELS

ALL OUR DISKS ARE FULLY GUARANTEED



ABOVE DISKS ARE OF THE HIGHEST QUALITY MANUFACTURED BY MITSUBISHI OR VERBATIM

FOR BULK BUYERS

500 DSDD Disks 135 tpi	£187.50
	£277.50
	oi£360.00

**** SPECIAL OFFER***

200 DSDD Disks135tpi + 2 X 100 Cap Boxes £86.95

PLEASE NOTE:- 100 CAP BOXES BOUGHT WITH DISKS £4.50

SONY BULK 3 1/2" DSDD DISKS AND BOXES

25 DSDD Disks	£13.75 + 100	Cap Box	£18.25
50 DSDD Disks	£26.50 + 100	Cap Box	£31.00
75 DSDD Disks	£38.65 + 100	Cap Box	£43.15
100 DSDD Disks	£49.95 + 100	Cap Box	£54.45
150 DSDD Disks	£73.50 + 100	Cap Box	£78.00

500 DSDD DISKS £240.00.

1000 DISKS £465.00

AMIGA 512K EXPANSION

INCLUDING MEMORY DISABLE SWITCH £46.50

INCLUDING BATTERY BACKED CLOCK

DISK STORAGE BOXES

3 1/2"	100 cap	£5.50
3 1/2"	10 cap	95p
10 for		£7.50
5 1/4"	100 cap	£5.50

STACKABLE BOXES

3 1/2" 80 cap (Baux)

	2	4	10	111	-	E	0	-	-	/ F	١.			١
5	+							₹	82	.00	0	ea	act	1
-		-	-					£		-	_			
1								£	29	.00	0	ea	act	1

3 1/2" 150 cap (Posso) **£15.95** each

PUBLIC DOMAIN

UTILITIES, GRAPHIC SOFTWARE, MUSIC SOFTWARE, GRAPHICS DEMOS, MUSIC DEMOS

HUNDREDS OF DISKS IN STOCK SEND FOR FREE CATALOGUE

£1.20 per disk

10 PD DISKS IN PLASTIC BOX

£9.95

PLEASE NOTE:-P.D DISK PRICES INCLUDE P&P

ACCESSORIES

Mouse Mats	£2.95
31/2" Cleaning Kits	
Mouse Pockets	£1.50
Labels per 1000	
51/4" Cleaning Kits	£1.80

Please add £2.95 P&P per order. Next day £10.00
Cheques/PO's to MEDIA DIRECT DEPT AFT
11 SAGE CLOSE, HANLEY

S-O-T ST1 3SF TELESALES HOTLINES 0782 208228





K & M COMPUTERS

THE BEST SOFTWARE \star \star \star THE BEST SERVICE

19.99
4.99
15.99
19.99
15.99
11.99
19.99
4.99
23.99
4.99
19.99
4.99
19.99
23.99
19.99
23.99
19.99
23.99

FREE MOUSE MAT with all orders over

£50	
Captain Blood	4.9
Conqueror	19.9
Cloud Kingdoms	
Damocles	19.9
Demons Tomb	19.9
Demons Winter	19.9
Double Dragon 2	
Dragon Scape	15.9
Dragons Breath	
Drakken	23.9
Dungeon Master (1meg)	19.9
D.Master Editor	8.9
D.Master Hint Book	8.9
Dyter 07	15.9
East v WestN	
Eagles Nest	
Electronic Pool	
Emlyn Hughes Soccer	
Singes Castle	
F29 Retaliator	
F16 Falcon	
Falcon Miss.Disc	
F.Ball Manager 2	15.9
Future Wars	19.9
Gold Of Americas	
Heavy Metal	19.9
Infestation	
Italy 1990 (Winners Edi)	
Italia 90	4.9
Jack Nicklaus Golf	
J. Nicklaus Course 1	9.9

International 3D Tennis	19.99
Kick Off 2 (Inc. World Cup)	19.99
Krypton Egg	15.99
Karate Kid 2	3.99

AMIGA SECOND DRIVE ONLY £79.99

,	NIdX	15.99
9	Leisure Suit Larry 3	
9	Knights/Crystallion	23.99
9	Life And Death	19.99
9	Licence To Kill	15.99
9	Last Ninja 2	19.99
9	Lords/Rising Sun	23.99
9	Lost Patrol	19.99
9	Manchester United	19.99
9	Maniac Mansions	19.99
7	Mechanicus	8.99
	Microprose Soccer	19.99
	Midwinter	23.99
	Matrix Marauders	15.99
19	Nervermind	
9	Nuclear War	N 19.99
9	North & South	19.99
9	Oil Imperium	19.99
9	Op.Thunderbolt	
19	P47 Thunderbolt	
'	Phantasie 3	
9	Pinball Magic	19.99
9	Prince	19.99
9	Pro. Tennis Tour	
9	Puffys Saga	
9	Rainbow Island	
19	Reach For The Stars	
19	Realm Of Trolls	8.99
19	Red Lightning	
9	Renaissance	
9	Risk	
9	Robocop	
9	Rocket Ranger	
9	Safari Guns	
-	Sarcophaser	
9	Sherman M4	
9	Silent Service	
9	Sim City	
9	Skidz	
9	Space Harrier 2	
9	Starflight	
9	Streetfighter	
9	Stryx	
9	Super league Soccer	10.00
9	Soccer	
9	Starray	
19	Sword Of Sudan	
19	Syvoid Oi Suddii	17.99

Their Finest Hour	.23.99
Tripatron	.23.99
Turricane	15.99
Ultimate Golf	
Vulcan	15.99
Warhead	19.99
Wanted	8.99
Waterloo	19.99
W.Gretzky Ice Hockey	19.99
Windwalker	23.99
World Boxing Manager	15.99
World Tour Golf	8.99
X-Out	15.99
Xenon 2	
Cyberball	15.99
Fright Night	
Treasure Trap	19.99
Pirates	
World Cup Soccer	19.99
Hotshots	8.99
Theme Park Mystery	19.99
Shadow Warriors	19.99
Sly Spy	19.99
Screaming Wings	
Revolution 101	19.99
Player Manager	15.99
Manic Miner	8.99
Treasure 1.Dizzy	4.99
Outlaw	4.99
Colorado	19.99
Dan Dare 3	15.99
Jumping Jackson	15.99
Shadow Of The Beast	
Defenders Of Earth	
Impossamole	15.99

FREE 3.5" Disc With every £25 SPENT

Escape/Robot Monster 15 00

Lacape No oot Monate	10.7
Tennis Cup	19.9
Persian Gulf Inf	
Xenomorph	19.9
E-Motion	
Hammerfist	19.9
Time Soldier	19.9
Hot Rod	19.9
Stella Crusade	
It Came F.T. Desert	23.9
Ivanhoe	19.9
Joan Of Arc	8.9
TV Sport Basketball	23.9
Starblade	19.9
Slaygon	3.9
Turn-lt	15.9

3.5"	DISCS
1	
5	4.50
10	8.75
20	17.00
30	25.00
40	32.00
50	39.00
100	75.00

HALF MEG. **UPGRADES**

Without Clock..59.95 With Clock65.95 With D.Master..69.95 Clock/D.Master79.95 With Dr.Lair89.95 Clock/Dr.Lair ...99.95

EDUCATIONAL

ı	LDOOAIIOIIA	-
ı	AB Zoo	3.99
ı	Three Bears1	8.99
ı	Fun School 2 U6 1	4.95
ı	Fun School 2 6-8 1	4.95
ı	Fun School 28+ 1	4.95
ı	Answer Back Jnr1	5.99
ı	Answer Back Snr1	5.99
ı	Discover Maths1	5.99
ı	Discover Chemistry .1	15.99
ı	Spell Book 4-91	5.99
ı	Mavis Beacon Typing .:	23.99
п	71 0	

BUSINESS SOFTWARE

Protext V4.2	64.95
Prodata	57.95
Publishers Choice	79.95
Amas Midi Int & S	74.95
Digicalc	26.95
Cashbook Controller	35.99
Deluxe Paint 1	9.99
X-Cad Designer	99.99
Pagesetter 2	79.95
AMOS Games Creator.	44.99
COMPILATIONS	
Precious Metal	19.99
Light Force	19.99
Magnum 4	23.99
Premier Coll. 2	23.99
Leaderboard Coll	19.99
Triad 2	
Story So Far	15.99
Stony So Far 3	15 00

JOY	ST	IC	KS

Cheetah 125+	/.95
Pro 5000	13.95
Konix Speedking	9.95
Speedking Auto	11.95
Navigator	13.95
Cruiser	9.50
Cruiser Auto	12.50
Jetfighter	
Cheetah Mach 1	10.50
Data 1	7.95
Mr Crystal	15.99
Comp. Pro Extra	15.95
Ergostik	17.99
Superboard	19.99

..27.95

ACCESSORIES

Contriver Mouse ..

Naksha Mouse39.95
Power Supplies47.95
Mouse/J. Stick Switch14.99
Mono Digitiser27.95
Stereo Digitiser39.95
Mini Amp. & Speakers44.95
Seal & Type12.50
Printer Lead5.99
Joystick Ext. Lds5.99
4 Player Adaptor5.99
Scart Lead12.99
Star LC 10 Printer179.00
Dust Cover4.99
Disc Box (80-100)9.99
Stackable Disc Box12.50
3.5" Drive Cleaner4.95
Ribbon Re-Fresh7.99
Ribbons From3.25
60g Cont. Paper2000 16.50
80g Cont. Paper2000 24.50
Vidi (Pal Version)99.00
Hand Held Games From6.99
Midi Interface 234.95
Screen Filter15.99
Mouse House3.99
Philips CM8833 Colour
Stereo Monitor255.00
5.25 Ext. Drive129.00
Replacement Internal
Drive59.00
Address Labels 10005.99
Mouse Mats4.99
Cleaning Kits9.99

ALL PRICES INCLUDE VAT AND P&P ON ORDERS **OVER £5 ORDERS UNDER** £5 ADD £1 P&P

K & M COMPUTERS 140 SANDY LANE CENTRE SKELMERSDALE LANCASHIRE WN8 8LH

PHONE 0695 29046 FAX 0695 50673



24 HOURS



N = New Game



GUIDING



COMPUTER GAMES HELPLINE

OUR LIVE OPERATORS CAN HELP WITH YOUR PROBLEMS - RING US BETWEEN 12 NOON & MIDNIGHT, 7 DAYS A WEEK ON

0898 338 933

We can help with over 600 adventures!

We also have cheats, tips and hints for 100's of arcade games for all computers and consoles!

MAKE NEW FRIENDS AND CONTACTS NOW! COMPUTACHAT 0898 338 939

Can link you with up to 10 other people from all over Britain. Chat about computers, graphics, music, programming or just games. Swap hints, tips or pokes for your favourite software. You can also buy, sell or swap your second-hand software and hardware through us.

Phone now for full details!

STOP PRESS

Play our new, computer-moderated adventure games, live on your telephone, with up to 6 other people.

WANTED! - Your hints, tips, cheats etc. Prizes for the best each month. Send them to: GUIDING LIGHT,

PO BOX 54, S.W. MANCHESTER, M15 4LS Calls charged at 25p per minute 'cheap' & 38p per minute all other times!

AMIGA FLIGHT 500 FANTASY

Pack includes.

Amiga A500, Power Pack, Modulator, Work Bench 1.3, Amiga Basic, First English Version Mouse, F29 Retaliator, Rainbow Islands, Escape From The Planet Of The Robot Monsters, Deluxe Paint II, 5 Blank Discs and Mouse Mat.

PLUS FREE Delivery - No hidden extras
The price you see is the price you pay

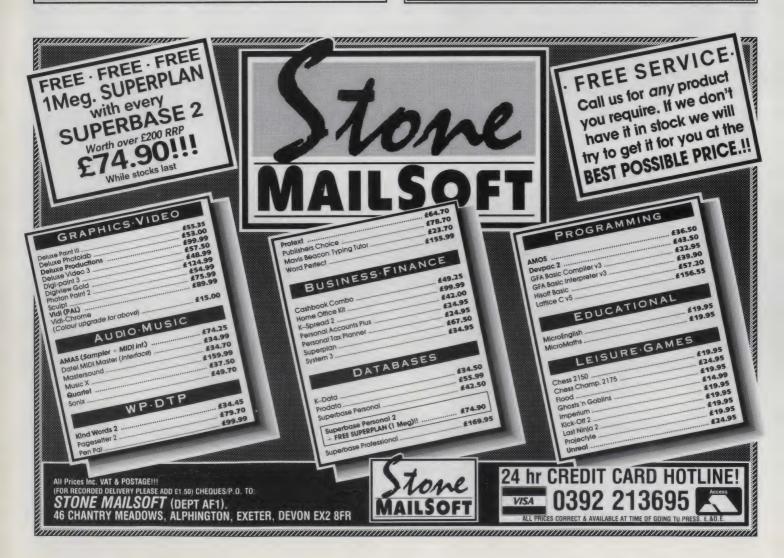
ONLY £379.99

FROM

BELSHAW'S COMPUTER SHOP

51 BALDERTONGATE, NEWARK, NOTTS NG24 1EQ TELEPHONE: (0636) 72503

CALLERS WELCOME



CASTLE

Incentive's 3D gothic dungeon adventure may have a lot of lovely rooms to explore, but that isn't much use if you get lost and wander into the claws of a demon after five minutes, is it? So what you need is some hints and maps to help you out. Well Lordy, Lordy – what have we here? Some hints and maps for Castle Master! That's handy 'Arry, stick it in the oven...

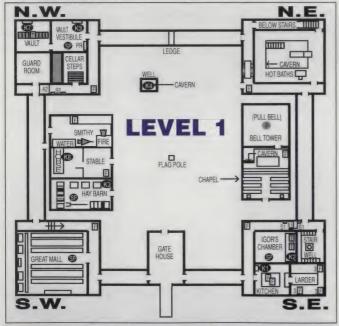
The key on the chapel roof can be a swine to get hold of if you don't know how to get up there. All you have to do is stand on the drawbridge and close it. You will then be lifted up, making it a doddle to get hold of the prize.

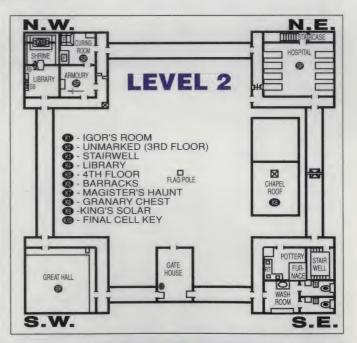
When trying to collect the pentacles in the caverns, fall down one of the trap doors and kill the spirit. Collect the first pentacle then go to the other caverns collecting the pentacles and killing the spirits. This will make the going easier if you fall into a cavern, since you're saved the hassle of tackling a spirit that catches you unawares.

To get inside the display chamber, crawl inside the granary chest and close the lid. Access is then as easy as falling off a rather

GAME BUSICIS

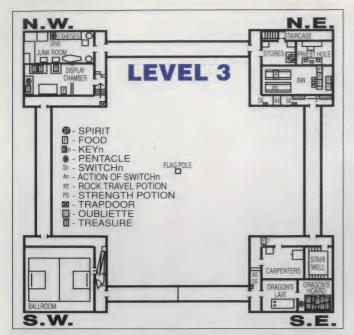
It may be too hot to sit in with your computer, but as you sit on the beach reading your mag you can always peruse these luverly tips and cheats that **MAFF EVANS** has sorted out for you, ready for when you hit those pixels again. Enjoy your holiday – it's back to work soon!

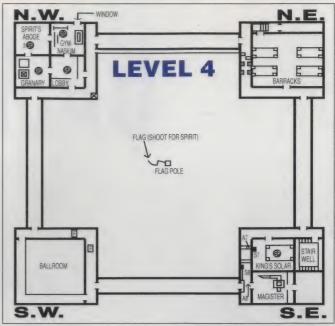














wobbly chair precariously perched on the top of a table.

Collecting the pentacle in the junk room isn't as obvious as it seems. When you enter the room, crouch down, walk over the first shelf and into the wall and stand up. Now do a U-turn and walk forward to collect the item.

To move the big rock or open the pottery door, you need to have maximum strength. If you haven't then find some food to top up your energy then try again.

If you have the rock travel potion, you can get to the gymnasium either from the Wizard's hut or from directly outside.

If you're having trouble finding the spirit in the dungeon, then try looking for something else rather than the obvious. Still stuck? Well try that rat-like animal at the back of the room...

of the room...
Now for the big baddy himself.
To kill Magister, the evil owner of the castle, wipe out all the other spirits first. Now go to his room and blast him in the forehead to destroy him.

David Adams, Troon, Ayrshire

OMEGA

The trick with this game is to learn how to program your tank's Al to best effect, but learning as you go along can be quite costly. After all tanks are not cheap! If you keep falling foul of Dinky no matter how hard you try, then try this preprogrammed Al for size:

START

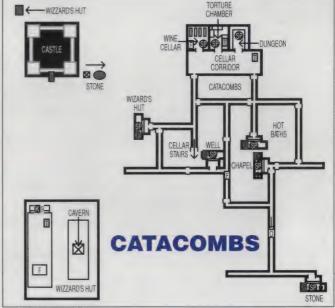
DO SEARCH
DO DESTROY
BRANCH TO START
INCLUDE SEARCH
INCLUDE DESTROY
JAM SCANNER SIGNAL
RESUME

Don't worry if you haven't got a scanner – you only really need it when you get to Intrepid.

Here is a list of the various tanks and their tactics to help you plan your Al routines:

DINKY – Uses Seek and Destroy tactics.

DINKY2 – Uses the same tactics as Dinky, but is better equipped.



BUSTER – Employs Seek and Destroy tactics and has a laser weapon. To get the best of Buster you need to use a Turbo-Laser.

DUCKY – Basically uses the same tactics as Buster, but sometimes uses Edge Search as well. Ducky also has slightly better equipment. **INTREPID** – Has the same Al

tactics as Buster, but benefits from being a lot better equipped.

EIDOLON – Uses a Scanner Lock and a Gauss Gun, so in fghting him make sure you take him on with a Plasma Gun.

PANDA – Uses seek and destroy tactics in collaboration with a Gauss Gun. When it sustains



HURRY - HURRY - HURRY

DS-DD 135TPI SPECIAL OFFERS

25 DS DD 135TPI 100% ERROR FREE. PLUS deluxe lockable storage box....£17.50 50 DS DD 135TPI 100% ERROR FREE, PLUS deluxe lockable storage box.... 75 DS DD 135TPI 100% ERROR FREE. PLUS deluxe lockable storage box.. ...£40.50 100 DS DD 135TPI 100% ERROR FREE, PLUS deluxe lockable storage box.....£54.50

175 DS DD 135TPI 100% ERROR FREE,	
PLUS 2 boxes	£88.50
250 DS DD 135TPI 100% ERROR FREE,	
PLUS 3 boxes	£115.50

All our 3.5 DSDD are certified 100% error free and lifetime guaranteed. All discs supplied with labels.

DS-DD SPECIAL OFFERS

PLUS deluxe storage box £19.50 50 DS DD 100% ERROR FREE, PLUS deluxe storage box 75 DS DD 100% ERROR FREE. PLUS deluxe storage box £24.50 100 DS DD 100% ERROR FREE, PLUS deluxe storage box

200 DS DD 100% ERROR FREE,
PLUS 2 boxes£54.50
300 DS DD 100% ERROR FREE,
PLUS 3 boxes£74.50

All our 5.25 DSDD are certified 100% error free and lifetime guaranteed. All discs supplied with labels.

DENSITY HIGH SPECIAL OFFERS

10 HD 1.44MB 100% ERROR FREE IN A PLASTIC LIBRARY CASE. 25 HD 1.44MB 100% ERROR FREE, PLUS deluxe lockable storage box£34.99 50 HD 1.44MB 100% ERROR FREE, PLUS deluxe lockable storage box 100 HD 1.44MB 100% ERROR FREE, PLUS deluxe lockable storage box ...

All HD 3.5 Discs Carry The HD Logo, and are certified 100% error free, lifetime warranteed for reliability and performance, and supplied with labels.

HIGH DENSITY

ı	25 HD 1.2MB 100% ERROR FREE,	
ĺ	PLUS deluxe storage box	£16.99
ı	50 HD 1.2MB 100% ERROR FREE,	
ı	PLUS deluxe storage box	£29.99
ı	75 HD 1.2MB 100% ERROR FREE,	
ı	PLUS deluxe storage box	£42.99
ı	100 HD 1.2MB 100% ERROR FREE,	
ı	PLUS deluxe storage box	£49.99
ı		

All HD 1.2 MEG 5.25 are certified 100% error free, lifetime warranteed for reliability and performance, and supplied with full user sets, labels etc.

BULK BUYERS

DOUBLE SIDED DOUBLE DENSITY 500 £195.00 £330.00

IMPORTANT NOTICE

Please note we do not sell cheap discs. We sell incredibly high quality discs

Accessories

80 Capacity Stackable Boxes£	12.9	95
Universal Printer Stands	£6.9	95
14" Tilt 'n' Turn Monitor Stands		
Atari or Amiga Replacement Mice£	19.9	95

COLOURED 3.5" DSDD DISCS

50 75	DSDD DSDD	135TPI 135TPI	Rainbow Rainbow	Discs£16.99 Discs£33.99 Discs£49.99
100	DSDD	135TPI	Rainbow	Discs£62.99

(packs are supplied in 5 different colours)

DISC-X-PRESS

101 BURNHAM ROAD, DARTFORD, KENT DA1 5AZ

TEL: 0322 289817 OR 0322 287687
All supplies are subject to availability. All prices inclusive of VAT & Delivery UK only







PCs/286s BELOW INCLUDE::

- Secretary Bird Word Processor, Spreadsheet, Database
- Free one year on-site maintenance
- MS DOS and GW Basic
- OPTIONAL MOUSE AT ONLY \$29.90

	Mono	COAGA	MonoV	GA Col
PC10 5,25" single drive	459	599	599	689
PC10 5.25" Double drive	519	639	649	739
PC10 5.25" and 720K 3.5" drive	569	709	719	805
PC20 5.25" with 20MB hard disc	669	789	819	899
PC20 5.25", 20MB hard disc + 720K	3.5739	959	989	969
PC 30 AT compat 3.5"	919	999		1099 EGA

PRINTERS

£119	CITIZEN 120D	£277	STAR LC 15 wide carriage
TBA	CITIZEN SWIFT 24	£335	STAR LC 24-15 wide 24-10
£133	STAR LC10	£189	AMSTRAD 3250 di
£169	STAR LC10 COLOUR	6229	AMSTRAD LQ 3500 24 PIN
6199	STAR LC 24-10 24 PIN	€199	PANASONIC 1180
6219	EPSON LOADO	6189	PANASONIC 1124 24 PIN

PANASONIC 1624

COLOUR SCANNERS

JX100 colour scanner A5 18 Bit plane JX300 colour scanner A4 24 bit plane Interface and software for JX300

PLEASE QUOTE WHERE AD SEEN WHEN ORDERING. At prices, except where stated are ex-VAT and offies are subject to ovaliability. These and specifications are correct at time of going to press, but are subject to change without notice. Furchase orders accepted from PLCs and Government bodies on 30 day terms. Goods are subject to our standard condi-tions of sale, available on request. Et & Ce

OUR COMMITMENT TO CUSTOMER CARE

We believe our customers have less problems competitors. However if you do have any grievances, please contact Linda in our Customer Services Department who will do everything possible to help.

TEST ON REQUEST

Equipment is generally reliable and all items are batch-tested before despatch. However, please state if your purchase is to be given as a present, so that we can fully test, just in

ORDERING To place your order

send cheque, postal order or offical order, plus £10 per box - (software free) for next day courier delivery and VAT to Dept AF Hobbyte Computers Ltd, 10 Market Place, St. Albans, Herts AL3 5DG, or call in with a copy of this ad at our branches in St. Albans and

You may also phone your order to our sales desk on St. Albans (0727) 56005 Access/Visa and official orders from government, education, medical authorities and PLCs are accepted.

Mail Order

MISTRAL COMPUTER **SUPPLIES** 0705 453814



13.99

29.99

3.99

..3.99 ..6.99 ..6.99

3.99

10.99

.10.99

Phone 359.99 379.99 355.99 ..89.99

.79.99

79.99 .247.99

29.99

90

ITLES |

AMIGA SOFTWARE

F29 Retaliator		F.O.				
Swords of Aragon	19.99		r The War			
Fire & Brimston	16.99		hoe			
Ghosts & Goblins (1 r	neg)16.99		Head			
Heros Quest (1 meg)	24.99		City			
Space Ace	29.99		ape From Singes Cast			
Their Finest Hour			omorgh			
World Cup Football M	anager16.99		Brigade			
Italy '90	16.99		ss Bow			
Turrican	13.99	Full	Metal Planet			
TurricanResolution 101	16.99	Itali	a 90			
Shadow Of The Beast	With T-Shirt .24.99	Cole	orado			
Man United	16.99	Leis	ure Suit Larry III			
Cyberball	13.99					
Emlyn Hughes	13.99		DUDCETT			
Dytir 07	13.99	X	BUDGET T			
Dytir 07 E.F.T.P.O.R.N.	13.99					
Dragons Breath	19 99	Spic	lertronic			
Pipe Mania	16 99		ter Killer			
Klax	13 99		n Blood			
Mile Stone	13 99	7,00				
Budokarn			gy Boy			
Kid Gloves	16 99	Thu	ndercats			
Space Rogue			ector			
Midwinter	19 99					
Tower Of Babel	13 00		ambled Spirits			
Super Cars	13.99	Ikar	i Warriors			
Super Cars	15.55	Inai	i waiiiois			
****	AMIGA HA	RI	OWARE			
Amiga Bat Pack						
Amiga Flight Of Fantasy						
The above with Tenstar Games Pk						
A590 Hard Drive 20Mb with free software						
A501 RAM Exp with Dungeon Master						
Trapper RAM with It Came From The Desert						
1084S Colour Monito						
Amiga Control Centre						
Sony Unbranded 3.5	disks 10					
	JU+					

Send Cheques/ PO to Mistral Computer Supplies, 42 Park Way, Havant, Hants PO9 1HH

Please add £5 per item of Hardware to cover 1st class postage: Softtware add 50p per game. Send for full Software and Hardware list.

COMPUTER CENTRE

place for AMIGA COMPUTERS

No. I in West London. All prices inc.V.A.T.

This Months Special Promotions

BUSINESS COLLECTION AMIGA: KIND WORD 2, K-DATA K-SPREAD 2

£69.99

Hardware

Amiga 500 Flight of Fantasy. £375 99 ALL WITH 4 TITLES, TV MODULATOR, MOUSE

Monitors (WITH AMIGA

Philips 8833 Colour Stereo. Commodore 1084 Colour Stereo....£239.99

Drives (EXTERNAL)

Cumana 1Mb Drive 3.5" 3.5" 1Mb Drive (NEC/Chinon) .£79.99 .£63.99 Amiga 20Mb Hard Disk Drive

Accessories

Amiga Mouse£	24.95
Memory Upgrade 0.5Mb£	49.99
As Above with Clock£	
Power Supplies£	39.00

3.5" EXTERNAL DRIVE 1MB (NEC / CHINON) SWITCH, THRU PORT

£63.99

Printers ALL UK SPECIFICATION

	STATE AND ADDRESS.
Mannesman Tally MT81	£134.95
Star LC-10	£159.99
Star LC-10 MKII	£198.99
Star LC-10 Colour	£209.99
Star LC-24-10	£239.00
Panasonic KXP1180	£169.99
Panasonic KXP 1124	£269.99

Software

.99
.99
.90
.90
.90
.90
.90

Business Collection: Kind Words 2, K-Data, K-Spread 2....£69.95

Pices include delivery for software and small items. Courier Delivery of hardware £7.99. UK mainland only * Above prices for mail order, Shop prices may vary * All offers subject to availability. E&OE. We are the corner of Hanger Lane (North Circular) & Queens Drive * Easy parking * Most models in stock * VISA AND ACCESS

10 DISKS 3.5" ONLY £4.99

with any purchase

damage it switches to Corner Search, so be ready to dodge out and blast it.

MIRAGE – The same tactics as Panda but with better equipment. **OGRE** – Employs Search and Killtank with a full range of equipment. It's a monster!

GENERAL HINTS

You may need to do a few evaluations before you are successful, so don't be too disheartened if you fail at the first attempt.

Remember to authorise your tank if you change the chassis.

Once you've reached the end of the game and smashed all the competition, just for a bit of fun change the Viper's chassis to High-Standard and put your tank into a melee battle. Now just sit back and watch the fun!

Gareth Davies, Norwich, Norfolk

NEVERMIND

Here is a list of the passwords to the first 26 levels of this strange, psychedelic Psygnosis 'adventure', but to be honest they sound like someone with a cold trying to eat a toffee!

0	MMMRHM
1	AMMRHA
2	HMMRHH
3	VMMRHV
4	PMMRHP
5	GMMRHG
6	IMMRHI
7	RMMRHR
8	MAMRHW
9	AMMRHN

HAMRHZ 10 11 VAMRHT 12 HMMWHH 13 **CMMRHQ** 14 **IAMRHB** 15 RAMRHE 16 MHMWHM 17 **AHMWHA** 18 HMMWHJ 19 VHWWHV 20 PHMWHP 21 **GHMWHG** 22 IHWWHI 23 RHMWHR 24 MVMWHW 25 AVMWHN

> Lee Holmes, Basildon, Essex

ANTHEADS

For all those B-movie buffs out there who have managed to conquer the original It Came from the Desert scenario and have progressed to the Antheads data disk, but are still having trouble cracking the case, here is a method of beating the formic foe.

DAY 1

Gather as much information from Biff and Dusty on the first day, but if you've got the information from previous games then don't worry, as it doesn't change.

Get into your car and go to the KBUG radio station. Dusty will tell you of the last ant attack to occur and will give you a Geiger counter and a gun.

Hang around for a while until the afternoon, then go round to the Platt University lab, where you will meet the boy Billy and his rather odd dad. When they start talking to you, ignore the gibberish that his dad speaks but listen carefully to what Billy has to say.

If you want further information then try asking the fortune tellers and expect to get home for around eight o'clock.

DAY 2

Go out to the KBUG radio station again, where Dusty will tell you about a threat from the G-men. Go back to the lab afterwards, where Billy once again provides some useful information.

At about one o'clock go to Neptune Hall, where you'll find that Billy Bob has managed to sprout a rather fetching set of antennae. Pull out your piece (that means your gun – this is a family show after all) and blast his antennae off. When he comes around he will give you an important number, so make a note of it.

DAY 3

You should wake up at 9 o'clock when Jakie comes round and knocks on the door. Unfortunately, your early-morning visitor is one of the Antheads, so get the trusty old gun working and write down the number again.

Go to the Ore Plant and befriend the manager by selecting choice A at the appropriate time. Take the train to section M-3 and do the business against the ants, then get back to the lab for some more useful info from Billy.

Go to the Police Station and get the old 'he must have must

have tripped on his shoelace, your honour' treatment so you get knocked unconscious. When you wake up, the nurse will give you the position of the vault. Go to the vault and get the records containing the conversation process, then make a run for it.

DAY 4

Drop by at Elma's and when he becomes an Anthead blast his stalks to get the last number. Now you have all three numbers, try and get into the hospital any way you can (preferably without injury). Get the lift to the basement and find the morgue in the top righthand corner - you can spot it by the four black slabs and the safe. Enter the numbers in the order you received them and you should be able to get the secret documents which will cause the realisation of the Antheads' existence, so now you can take them on face-to-face.

> David Norfolk, Watford, Hertfordshire

CADAVER COVER DEMO

Looks like some of you were pretty impressed with last month's cover demo, since we've had a solution to the mission after only a couple of days! Kick up your Coverdisk and read on...

To start with, press the button on the West wall twice (North being top right), then collect all the objects in the room. Exit to the North and shoot the green slimy

KLAX



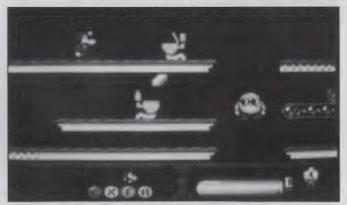
If you've already got coloured tiles spinning in front of your eyes from playing this too much and you STILL can't get to the last screen, then follow this advice. It could save you time and a massive optician's bill.

Hold down the space bar while playing and hit the '4' key (the one

under the function keys, not on the keypad) and you will be magically transported to level 100 - the last wave. But you've still got to get those Klaxes to finish the game, so keep trying! He-he!

Ken Grassham, Adel, Leed

MANIC MINER



Even the nostalgia value failed to redeem this from a harsh review, but if you have got hold of a copy, then here is a cheat that you may find rather useful.

Hit space to pause the game, and hit the * (asterisk) key on the keypad. Press space to start the game again and you should have nine lives. You can do this at any

point in the game to stock up your chances. However, even with this cheat Mark can't get past the 'Miner Willy Meets the Kong Beast' screen (which we're sure is bugged). Just goes to show really, doesn't it?

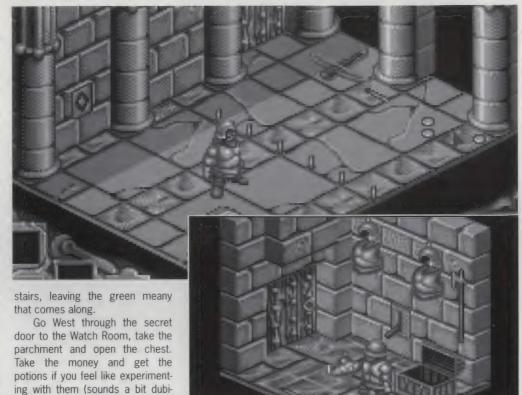
Mark Lambourne, Bicester, Oxfordshire thing twice with the crossbow, then collect the large iron key and go East to the Passage. Continue to the East into the Armoury and open the chest to collect the shard and the stamina potion. Next pull the lever and go back into the Passage once more.

From here take the South door into the Guard Chamber and go up the stairs into the Barrack Room. Ignore the slimy monster, as it comes back if you kill it. Once in the Barrack Room, take the stamina potion if you need it and exit North into the second Passage, taking the East door into the Captain's room. Jump onto the chest and push the trophy, which will cause a key to fall from the roof onto the bed. Jump down and open the chest, taking the money, the key and if you want to try it the Freeze scroll. Jump onto the bed and pick up the small, golden key and the shard.

Go West into the Passage and carry on West to the Guard's Hall. Leave by the West exit to reach the Upper Store, then go South to the Watch Post to get the key with the Gaoler's seal and also the sword hilt.

Go North back into the Upper Store and take the West door to the Cell. Pull the lever and jump down into the pit, then use the Goaler's key in the keyhole and climb up the chain.

Walk East twice to reach the Guard's Hall then South to the Trap Room. Open the casket and take the gem, then walk over the red circle, dropping the hilt and both shards. Collect the broadsword and go North back to the Guard's Hall. Pull the lever and run up the



Acid and Ecstasy). Retrace your steps (East, Go up the stairs to the Ward East, Down and North) so that you Chapel, then go to the Outer Stair get back to the Passage, then go (which should be North, East, North to the Outer Stair and take the brass key. Go back to the North, East and finally North). Push the broadsword into the slot main Passage (where you started, on the West wall, then put the which should be South, West then three green gems in the triangular South), and take the West door to hole in the North wall in the corthe Stairway. Unlock the North rect order (to take away one spike door with the brass key and go at a time). Climb the steps to the through the door to the Store. West (to the main Passage) and Open the chest, take the gem then take the coin. Fall off the platform pull the lever and jump down the and put the coin in the slot on the hole. Once you're at the bottom, West wall. Then go East then jump up, leave by the West door North to the Outer Stair once to the Stairway and take the gem.

again, then West up the stairs to the main Passage and finally North to finish the mission.

You should now finish with the status ratings of...

Health – 100%, Gold – 423, Experience – 835 and 99% of the mission completed. What about the other one percent? Well you'll just have to wait until the full game is released, won't you?

John Taylor, Wisbech, Cambridgeshire

IVANHOE

ous to me, especially in this age of



Forsooth sirrah! Methinks that there are a mite too many dangers to fight through on this medieval romp! Verily, never more shall ye be at the mercy of the fearful foe! Just push on thine keyboard the key that shall pause the game and scribe the word ZOBINETTE followed by the Return key. Now thy can just press the

key inscribed with an N to magically transport thyself to the next level. Now is the winter of our discontent made glotious summer by this handy tip...

Philip Grant, Newcastle-Upon-Tyne

WINNERS!

Loverly, scrummy software vouchers this month going out toooo...
David Adams for his marvellous Castle Master maps, John Taylor for the nicely typed Cadaver Demo solution and Gareth Davies for his monstrous Omega hints.

Feel like you've got a tip, hint or map that we may be interested in? Then send it in to GAME-BUSTERS, AMIGA FORMAT, 30 MONMOUTH STREET, BATH, BA1 2BW. Oh and PLEASE include a phone number if it's at all possible, we may need to get in touch with you. After all, if you've won a prize you want to make sure you get it don't you?

By the way, we're still interested in good maps sent in on disk, 'cause they look ever so nice in the mag. So get those copies of *DeluxePaint* working and send them in!

Amiga 500 Batman Pack £369.95

ORDER SOFTSELLERS LTD

MAIL ORDER

A590 Hard Drive £369.95



6 Bond St., Ipswich, Suffolk. IP4 1JE

5a Dogs Head St., Ipswich, Suffolk, (Retail). 36a Osborne St., Colchester, Essex (Retail).

MAIL ORDER PURCHASE LINE (0473) 257158/210605 FAX (0473) 213457

5th Gear 1 68B Attack Sub 1 *Action Fighter 1 *Action Fighter 1 *Action Fighter 1 *Ancidada Championship Football 1 *Anzient Art of War 1 *Ancient Art of War at Sea 1 Ants Head (Data Disk) 1 *Aquiventura 2 *Atomics 1 *Balance of Power 1990 1 Barbarian II (Palace) 1 *Barbarian II (Psygnosis) 1 *Bangkok Knights 1 Battlechess 1 Battmar (The Movie) 1 Battle of Britain 1 Battle Squadron 1 Betrayal 1	6.99 5.99 6.99 3.99 6.99 6.99 4.99 3.99 6.99 6.99 6.99 6.99 6.99 6.99 9.99	Forgotten Worlds. *Fourth Dimension *Frankenstein Full Metal Planet. *Future Basketball Future Wars Gazza's Super Soccer Grand National Ghostbusters II. Gunship. Gravity Games Summer Edition Ghouls and Ghosts Halls of Montezuma Hammerfist Highway Patrol	.16.99 .12.99 .15.99 .16.99 .16.99 .19.99 .16.99 .15.99 .15.99 .16.99 .16.99 .16.99 .16.99	Pictionary. *Panic Station Projectile Pro Tournament Tennis Quartz *Quartz *Quarterback Rainbow Islands *Renegade R.V.F. Honda Red Storm Rising Resolution 101 Risk Rally Cross	
*Action Fighter 1 *Addidas Championship Football 1 *Ancidas Championship Football 1 *Ancient Art of War 1 *Ancient Art of War 4 Sea 1 Ants Head (Data Disk) 1 Anquaventura 2 *Atomics 1 *Back to the Future II 1 Balance of Power 1990 1 Barbarian II (Palace) 1 *Barbarian II (Palace) 1 *Barbarian II (Psygnosis) 1 *Bangkok Knights 1 Battlechess 1 Batman (The Movie) 1 Battle of Britain 1 Battle Squadron 1	5.99 6.99 3.99 6.99 4.99 3.99 4.99 5.99 6.99 6.99 6.99 6.99 6.99 9.99	*Frankenstein. Full Metal Planet. *Future Basketball. Future Wars. Gazza's Super Soccer. Grand National. Ghostbusters II. Gunship. Gravity Games Summer Edition. Ghouls and Ghosts. Halls of Montezuma Hammerfist.	.12.99 .15.99 .16.99 .16.99 .16.99 .19.99 .16.99 .15.99 .16.99 .13.99 .16.99 .16.99	Projectile Pro Tournament Tennis Quartz *Quartz *Quarterback Rainbow Islands *Renegade R.V.F. Honda Red Storm Rising Resolution 101 Risk	16.99 15.99 13.99 16.99 15.99 15.99 15.99 15.99 15.99
*Addidas Championship Football 1 *Anarchy	6.99 3.99 6.99 6.99 2.99 4.99 3.99 6.99 6.99 6.99 6.99 6.99 9.99	Full Metal Planet *Future Basketball Future Wars Gazza's Super Soccer Grand National. Ghostbusters II. Gunship. Gravity Games Summer Edition. Ghouls and Ghosts. Halls of Montezuma Hammerfist. Highway Patrol.	.15.99 .16.99 .16.99 .16.99 .19.99 .16.99 .15.99 .16.99 .13.99 .16.99	Pro Tournament Tennis. Quartz. "Quarterback. Rainbow Islands. "Renegade. R.V.F. Honda Red Storm Rising Resolution 101.	16.99 15.99 16.99 16.99 15.99 15.99 16.99 13.99
*Anarchy. 1 *Ancient Art of War 1 *Ancient Art of War at Sea. 1 Ants Head (Data Disk). 1 Aquaventura 9 *Atomics. 1 *Balance of Power 1990. 1 Barbarian II (Palgace). 1 *Barbarian II (Psygnosis). 1 *Bangkok Knights. 1 Battle Chess. 1 Battman (The Movie). 1 Battle of Britain. 1 Battle of Britain. 1 Battle Squadron. 1	3.99 6.99 6.99 2.99 4.99 3.99 6.99 6.99 6.99 6.99 6.99 6.99 9.99	*Future Basketball Future Wars Gazza's Super Soccer Grand National Ghostbusters II. Gunship Gravity Games Summer Edition. Ghouls and Ghosts. Halls of Montezuma Hammerfist. Highway Patrol.	.16.99 .16.99 .16.99 .19.99 .16.99 .15.99 .16.99 .16.99 .16.99	Quartz "Quarterback Rainbow Islands "Renegade R.Y.F. Honda Red Storm Rising Resolution 101 Risk	15.99 13.99 16.99 15.99 15.99 16.99 13.99
*Ancient Art of War *Ancient Art of War at Sea	6.99 6.99 2.99 4.99 3.99 6.99 6.99 6.99 6.99 6.99 6.99	Future Wars. Gazza's Super Soccer. Grand National Ghostbusters II. Gunship Gravity Games Summer Edition. Ghouls and Ghosts. Halls of Montezuma Hammerfist. Highway Patrol.	.16.99 .16.99 .19.99 .16.99 .15.99 .16.99 .13.99 .16.99 .16.99	*Quarterback. Rainbow Islands *Renegade R.V.F. Honda Red Storm Rising Resolution 101 Risk	13.99 16.99 15.99 15.99 15.99 13.99
*Ancient Art of War *Ancient Art of War at Sea	6.99 6.99 2.99 4.99 3.99 6.99 6.99 6.99 6.99 6.99 6.99	Gazzá's Super Soccer Grand National Ghostbusters II. Gunship. Gravity	.16.99 .19.99 .16.99 .15.99 .16.99 .13.99 .16.99	Rainbow Islands *Renegade RVF. Honda Red Storm Rising Resolution 101 Risk	16.99 15.99 15.99 16.99 13.99
Ants Head (Data Disk). 1 *Aquaventura 9. *Atomics. 1 *Back to the Future II 1 Balance of Power 1990 1 Barbarian II (Palace). 1 *Barbarian II (Psygnosis). 1 *Bangkok Knights. 1 Battlechess. 1 Battman (The Movie). 1 Battle of Britain. 1 Battle of Britain. 1 Battle Squadron. 1	2.99 4.99 3.99 6.99 5.99 6.99 6.99 6.99 6.99 9.99	Grand National Ghostbusters II Gunship Gravity Games Summer Edition Ghouls and Ghosts Halls of Montezuma Hammerfist Highway Patrol	.19.99 .16.99 .15.99 .16.99 .13.99 .16.99 .16.99	*Renegade	16.99 15.99 15.99 16.99 13.99
*Aquaventura 9 *Atomics	4.99 3.99 6.99 5.99 6.99 6.99 6.99 6.99 9.99	Ghostbusters II. Gunship. Gravity Games Summer Edition. Ghouls and Ghosts. Halls of Montezuma. Hammerfist. Highway Patrol.	.16.99 .15.99 .16.99 .13.99 .16.99	R.V.F. Honda Red Storm Rising Resolution 101	15.99 15.99 16.99 13.99
*Aquaventura 9 *Atomics	4.99 3.99 6.99 5.99 6.99 6.99 6.99 6.99 9.99	Gunship Gravity Games Summer Edition Ghouls and Ghosts Halls of Montezuma Hammerfist Highway Patrol	.15.99 .16.99 .13.99 .16.99	R.V.F. Honda Red Storm Rising Resolution 101	15.99 15.99 16.99 13.99
*Atomics. 1 Balance of Power 1990. 1 Barbarian II (Palace). 1 Barbarian II (Palace). 1 *Barbarian II (Palygnosis). 1 *Bangkok Knights. 1 Battlechess. 1 Battman (The Movie). 1 Battle of Britain. 1 Battle Squadron. 1	3.99 6.99 5.99 6.99 6.99 6.99 6.99 9.99	Gravity Games Summer Edition Ghouls and Ghosts Halls of Montezuma Hammerfist Highway Patrol	.16.99 .13.99 .16.99	Red Storm Rising	15.99 16.99 13.99
*Back to the Future II 1 Balance of Power 1990 1 Barbarian II (Palace) 1 *Barbarian II (Psygnosis) 1 *Bangkok Knights 1 Battlechess 1 Batman (The Movie) 1 Battle of Britain 1 Battle of Britain 1	6.99 5.99 6.99 6.99 6.99 6.99 6.99 9.99	Games Summer Edition	.13.99 .16.99 .16.99	Resolution 101	16.99
Balance of Power 1990 1 Barbarian II (Palace) 1 *Barbarian II (Psygnosis) 1 *Bangkok Knights 1 Battlechess 1 Batman (The Movie) 1 Battle of Britain 1 Battle Squadron 1	5.99 6.99 6.99 6.99 6.99 6.99 9.99	Ghouls and Ghosts	.16.99 .16.99	Risk	13.99
Barbarian II (Palace)	6.99 6.99 6.99 6.99 6.99 9.99	Ghouls and Ghosts	.16.99 .16.99		
*Barbarian II (Psygnosis) 1 *Bangkok Knights 1 Battlechess 1 Battman (The Movie) 1 Battle of Britain 1 Battle Squadron 1	6.99 6.99 6.99 6.99 9.99	Halls of Montezuma	.16.99		
*Bangkok Knights	6.99 6.99 6.99 9.99	Hammerfist		Rock and Roll	13 99
Battlechess. 1 Batman (The Movie) 1 Battle of Britain 1 Battle Squadron 1	6.99 6.99 9.99	Highway Patrol		Rorke's Drift	16 99
Batman (The Movie)	6.99 9.99			Rotox	16 00
Battle of Britain	9.99	Hillsfar			
Battle Squadron1	5.99	Hard Driving	13.99	S.E.U.C.K.	42.00
Potraval 1		Heavy Metal	16 99	Scramble Spirits	
	5.00	Hound of Shadow		*Secret Agent Flies By	13.99
Beverly Hills Cop		Hot Rod	16.99	*Shadow Warriors	
Beach Volley1		*Hoyles Book of Games		*Skate or Die	
Battlevalley		Imperium		Skidz	13.99
Black Tiger		Indiana Jones (Lucas Films)		Sonic Boom	16.99
		Indiana Jones (US Gold)		Space Harrier (New)	12.99
*Blade Warrior1	5.99	lvanhoe		Space Harrier II	13.99
Blue Angels	5.00	Infestation		Space Ace	29.99
Bad Company1	5.99	Interphase	15.00	Starflight	16.99
Battle of Austerlitz1	0.00	*Interpride	16.00	Stryx	13.99
Bomber1		*International Championship Wrestling	16.00	Space Quest III	
Budakhan1		*International 3D Tennis	10.99	*Star trek 5	
Cabal1		Iron Lord	10.00	Steve Davis Snooker	
California Games1	3.99	*Iron Tracker		Story So Far I (Compilation)	
*Carthage1	5.99	Italy 1990	.16.99	Story So Far 3 (Compilation)	
Chase HQ1	6.99	*Jack Boot	.16.99	Stunt Car	
*Chaos Strikes Back1	6.99	*Jack the Ripper	.12.99	Shinobi	13.77
*Chuck Yeagers A.F.T1	6.99	Jumping Jackson	.12.99	*Church Fighting Man	12.00
Colorado1		Kenny Dalglish Soccer Match	13.99	*Street Fighting Man	10.00
*Combo Racer1	3.99	Kick Off		*Scroll	
Conflict Europe1	6.99	Kick Off II		Switchblade	
Conqueror1	6.99	Kick Off II World Cup Ed	16.99	*Silpheed	19.99
*Corvette1	9.99	Kick Off Extra Time	9.99	Slayer	13.99
*Commandos Compilation1	5.99	Krystal	19.99	Stormlord	
Cyberball1	3.99	*Killing Game Show	13.99	Shadow of the Beast	
*Chicago 901	2.99	Klax	13.99	Sherman M4	
Chambers of Shaolin1	5.99	Knights of Crystalian		Star Blaze	
*Damocles1	5.99	*Krypton X	12.99	*Super Quintet	
Day of the Tiger1	5.99	*Leaving Terramis	16.99	Super Cars	13.99
Dan Dare 31	3.99	Legend of Djel	16.99	Sim City	19.99
Defenders of the Earth1	2.99	Leisure Suit Larry II	19.99	Seven Gates of Jambala	15.99
Dragon's Breath1	9.99	Lightforce (compilation)	16.99	*Super League Manager	16.99
Dragon Flight1	9.99	Lombard R.A.C. Rally		Super League Soccer	
*Dragon War1		*Last Ninja II	16.99	*Survivor	
Dragons of Flame1		*Lost Patrol		Tennis Cup	
Dungeon Master1	6.99	*Last Stuntman		*The Keep	
Dungeon Master Editor	9.99	*Majic Fly		*Toyottes	
*Dreadnought1	3.99	Magnum 4 Compilation		Triad II (Compilation)	
Demons Tomb1	3.99	*Majic Johnson		TV Sports Football	
Drakken1		Man United	16.99	*Trivial Pursuit (Family Edition)	16.99
Double Dragon II1		Manic Mansion	16.99	Theme Park	
*Dynamic Debugger1	5.99	*Matrix Marauders		*Turbo Buggies	
*Eagle Rider1	6.99	*Microprose World Cup Soccer II		Tower of Babel	
Elite	5.99	Midwinter			
*Elvira Mistress of the Dark1	9.99	*Mitro	13.99	*Trivia	
Emlyn Hughes International Soccer1	6.99	New York Warrior	24.99	*Track Attack	
E-Motion1		Ninja Spirit	16.99	Turbo Outrun	
*Epoch1		Ninja Warrior	.16.99	Typhoon Thompson	
Escape from the Planet of Robot Monsters 1		North and South	.15.99	Ultimate Golf	
*Eye of Hercules1	16.99	Nuclear War	16.99	Ultimate Darts	
*Flash Dragon1	3 90	Operation Thunderbolt		*Universe III	
F29 Retaliator	16.99	*Oriental		Untouchables	
*F19 Stealth Fighter	5 00	Onslaught	13.99	*UMS II	15.99
mar 6 1 1 10 1 1	5 90	Overlander	19 99	Ultima V	19.99
Falcon	16.00	Paperboy		*Venus Fly Trap	13.99
Falcon Mission Disks	12.00	Pinball Majic	16.99	*Warmonger	16.99
		Police Quest II		Waterloo	
Fast Lane				Wild Streets	
*Federation Quest 1		Populous		World Cup Soccer '90	
Ferrari Formula One	10.99	Planet Busters		Warhead	
Fiendish Freddy	19.99	Populous Data Disks	10.00	*Warp	
*First Contact	15.99	Premier collection 3 (Compilation.)	10.00	Winners (Compilations)	19 90
*Final Battle	16.99	Player Manager	12.99	Xenomorph	16.99
*Flirt		P47	15.99	Xenomorph	
*Flood		Powerdrift		X-Out	13.00
Footballer of the Year II	13.99	*Powerdroid	10.99	A-Odt	

AMIGA 500 "FLIGHT OF FANTASY"

Modulator, F-29 Retaliator, Rainbow Islands, Deluxe Paint I E.F.T.O.R.M.I.

£369.95

AMIGA 500 **BATMAN PACK**

Modulator, BATMAN, New Zealand Story, Interceptor, Deluxe Paint II

£369.95

AMIGA 500 + 1084S

Either pack above + colour monitor

£599.95

AMIGA 500 CLASS OF 90's

Educational Pack

£529.95

COMMODORE 1084S

Colour Monitor

£249.95

AMIGA EXTERNAL DRIVE

Power Drive 1 Meg D.S £79.95

AMIGA MEMORY EXPANSION

512K + Clock Card & Free game

£79.95

A590 HARD DRIVE

20 Meg Hard Drive

£369.95

CHEQUES AND POSTAL ORDERS MADE PAYABLE TO SOFTSELLERS. POST & PACKING FREE IN UK. OVERSEAS £1.50 PER ITEM except hardware charged at cost. Subject to availability and price change without notice. "Some titles may not be released at time of going to press. Shop prices may vary, but personal callers can claim advertised discounts on production of cut-off slip.

TITLE	COMP	PRICE
Amiga 500		
Class of 90 Pack	TOTAL COST £:	

Have you ordered from us before?	YES	NO	
Name			
Address		•••••	
Tel. No:			Amiga 500

AMF SEPTEMBER

Flight of Fantasy £369.95

YOUR ONE STOP SHOP

MORE SOFTWARE THAN YOU CAN HANDLE! MORE HARDWARE THAN YOU CAN USE!



SUPERSTORE

AMIGA 512K MEMORY EXPANSION

- * Brings your Amiga up to 1 Meg in seconds.
- * Enable/disable switch. Now you can run **ALL** software.
- * Easy to fit no technical knowledge or tools needed.
- * Reliable, fast, high quality chips on a robust through plated P.C.B. Do not confuse with cheaper, inferior products.
- * DOES NOT INVALIDATE GUARANTEE.

ORIGINAL from Commodore R.R.P. £149.99

The

WE STOCK MOST DATEL **PRODUCTS**

New!

AMIGA 1010

EXTERNAL 3.5" DISK DRIVE

Why pay more for immitations when the real thing is this price?

now Only £5

+£3 Postage

Only while stocks last

ONLY £39.99 +£2 Postage

ONLY £49.99 +£2 Postage

WITH CLOCK/CALENDAR



AMIGA MEGAPACK

The 1 Meg AMIGA pack

Exclusive to Software Superstores

	R.R.P.
A500 + RAM Upgrade	£479.98
TV MODULATOR	24.99
·BATMAN(THEMOVIE)	24.99
· NEW ZEALAND STORY	24.99
· DELUXE PAINT II	49.99
·INTERCEPTOR	
Galaxy Force	24.99
Fighting Soccer	
POWER DRIFT	24.99
DYNAMITE DUX	24.99
BLOOD MONEY	
Blasteroids	19.99
TEN STAR PACK	229.50
Computer care kit	7.99
10 Blank disks	
Lockable disk box (40)	9.99
Quickjoy II Joystick	8.99
Carriage	. FREE
TOTAL R.R.P.	£1046.33

OUR PRICE **£499**.99

Items marked • are in the BATPACK. The FLIGHT of FANTASY pack is also available for the same price

AMIGA Business Pack

- AMIGA A500 + Ram upgrade gives -
- 1 Meg of Memory Essential for business
- Modulator Mouse PSU Manuals & Disks - Plus All Leads
- 10 Blank Disks & Disk Box (holds 40)
- Business Software Pack Includes:-
- ✓ Deluxe Paint II
- √ KindWords 2.0
- ✓ Superbase Personal II

Only c









AUMIIGA

DRIVES

the BEST NAME in Disk Drives

- Legendary Quality Great Styling
- **Total Compatibility**
- **Fully Guaranteed**
- **Outstanding Spec**

NOW Only

Carriage & insurance £2.00

MAIL ORDER:- HOTLINE (0782) 204639 OR FAX (0782) 202269

Carriage: All goods sent by post. Or add £5 per major item for next working day Courier service POST to Unit 7a Oldham St, Hanley, STOKE on TRENT. ST1 3EY Callers welcome at our shops

STOKE-ON-TRENT

11 Market Square Arcade Hanley. Stoke-on-Trent Manager: Adrian Tel: 0782 268620 Open 6 Days

SHEFFIELD

6 Waingate, Sheffield Manager: Tony Tel: 0742 721906 Open 6 days

ST HELENS

27 Baldwin Street, St Helens. Manager: Adrian Tel: 0744 27941 Closed Thursday

STOCKPORT

6 Mealhouse Brow, (Off Little Underbank), Stockport Manager: Ray Tel: 061 480 2693 Closed Thursday

EVERYTHING you could possibly need for your AMIGA

Blank Disks

We sell only the highest quality blank disks 100% certified and made in Japan. Each disk is guaranteed for life.

Sony Branded Box 10£14.99 With FREE Disk Box (40)

Unbranded **BULK PRICES** 50£29.99 100£57.99 200£99.99 Add £2 postage per order



PRINTERS

Star LC10

"Best Buy" budget printer.

Only £169.99

Star LC10 Colour

£219.99 Only

Star LC24 - 10

Only £259.99

AMIGA ATARI & PC SOFTWARE

This HORSE RACING software was used to select the 100/1 NORTONS COIN outsider in this years GOLD CUP. Data for this program requires the RACING POST. An INTERNATIONAL version is available for AMIGA & ATARI computers using the DAILY MIRROR for data on UK races.





Let your computer WIN THE POOLS for you with our latest software. We have used the same sums that the **TIPSTER** proves can beat the odds to give you a better chance with on any pools coupon. The AUSTRALIAN version is included on the disk which also contains the LATEST ENGLISH leagues.





* * * SPECIAL OFFER * * * Save £5.00 if you buy both THE TIPSTER and THE PUNTER at the same time.

> TAM Marketing 7 GD UNITS Marsh Barton Trading Estate Exeter, Devon Telephone: (0392) 215485

HAMPSHIRE MICRO COMPUTERS LTD Unit 11 Kingdom Close, Segensworth East, Hants PO15 5TJ

TEL . NARO RREG11 FAX- DARO RRS651

IEL: U407 00	DYII FMA:	U407 00303 I
PRINTER PRICES INCLUDE CABLE & PAPER	PRICES SHOWN ARE EXCLUSIVE OF VAT	PRICES SUBJECT TO CHANGE
Citizen 120 Plus £112	LC10 Cut Sheet Feeder £51.30	AMIGA ACCESSORIES
Citizen Swift 24 £265	Swift 24 Colour Upgrade £31.30	Amiga 500 Batpack £312
Citizen Swift 9 £197.80	LC24 10 Cut Sheet Feeder £51.30	Amiga 500 Flight of Fantasy £312
Star LC10 mono £129 Star LC10 colour	Panasonic 1124 Cut Sheet Feeder	Amiga 500 Class of 90's pack £460
£169 Star LC24 10	£98.26 Hewlett Packard Font	Pro 5000 Joystick £11.26
£195 Panasonic 1124 £229	FX80 Cartridge £49.00	Philips 8833 Colour Monitor £204
Panasonic 1180 £139	LC120D Cut Sheet Feeder £60.00	8833 Dust Cover £6.00
Epson LX400 £139	PRINTER RIBBONS 120D original£4.00	Amiga to Philips Lead £6.91
Epson LQ400 £215	LC10 colour£6.00 LC10 mono£4.00 LC24IQ£6.00	1/2 meg Ram upgrade £42.60
Taxan KP815 £146.96	Panasonic II24£8.65 Panasonic II80£8.65	Amiga PC Emulator £278.27
Integrex colour printer £540	HP Deskjet Cartridge£14.05 Epson LQ550£4.33 Epson LQ840£8.65	Cumana External Drive £72
Hewlett Packard Deskjet £473.04	Star LC10 Dust Cover £4.00	X10 D/D D/S Disks 3.5 £7.39
Hewlett Packard Deskjet Plus £560.00	Citizen 120 Dust Cover £4.00	Amiga 2000 Base Unit £882.00

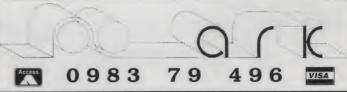
VISITORS ARE WELCOME AT OUR SHOWROOM MON-FRI 9am-5.30pm SATURDAY 9am-1pm. 12 months guarantee. Phone for price list SECURICOR DELIVERY: £7 + VAT. POST: £1 + VAT or £3 + VAT FOR LARGE ITEMS.

ACCOUNTS Arena Integrated Acc119.83 Cashbook Combination ..59..80 Cashbook Controller39.79 Desk Top Budget34.96 EasyLedgers. BOOKS 1st Book Of Amiga......16.95 Adv Sys Programming basic 16.495 Adv Sys Prog Guide32.95 Amiga For Beginners12.95 Amiga Machine Language 17.95 Graphics Inside & Out.... Hardware Ref Manual... Includes & Autodocs.... Kickstart Guide Kids And The Amiga.... COMMUNICATIONS .69.92 traDesign..... Cad Designer..... Cad Prof 1.5MB COVERS 1084S/8833 Monitor......8.97 A2000 Computer A500 Computer14.95 Citizen 120D9.89 CUSTOM MADE COVERS....14.95

Epson LX80.86 Printer9.89	23 Pin D Ty
Star LC10 Printer9.89	
Star I CO4/10 Printer 0.80	512K RAM
Star LC24/10 Printer9.89 DATABASE MANAGERS	512K RAM A
Infafile 04 04	A Max Mac E
InfoFile24.84	
Mailshot Plus39.79	A4 Flat Bec
Microfiche Filer59.80	A590 20ME
Prodata57.96	A.M.A.S. St
Superbase Personal39.79	Cable D25P-
Microfiche Filer	Cable D25P-1
Superbase Personal 2 1MB .62.79	Cable D25P-
Who What When Where29.90	Cable D25S-I
DESKTOP PUBLISHERS	Cable D25P-
Clip Art (PD) 7 disks14.95	Cable D25P-I
PageSetter 2 1MB74.98	Cable D25P-
PageSetter 2 1MB74.98 Pagestream 1MB129.95	Cable D25P-
Prof Page 1.5MB179.86	Cable DIN5
EDUCATION	Cross Over
Fun School Under 616.79	Digi View G
Fun School 6 to 816.79	Disk Step S
Fun School 8 and over16.79	Disk Wallet
GCSE Tutors (various)24.84	Disks
Lang Tutors (various)29.90	Gender Ch
My Paint34.96	Gender Chi
EDITORS	Joysticks
CygnusEd Professional 264.86	MasterSour
GRAPHICS	MIDI Master
3D Design Disks	Minigen Ge
3D ProfessionalQuery	Naksha Mo
Animagic Editor/Effects54.97	POWER PC
Clip Art PD	RAM A500
Comic Setter39.79	RAM A500 5
Credit Text Scroller	RS232 Mini
Deluxe Paint 3 1MB57.96	RS232 Null
Deluve Print 9 39 79	RS232 Patc
Deluxe Print 239.79 Deluxe Video 3 1MB69.92	Sound Trap
Digi Paint 354.97	Switch Box
Distant Suns49.91	Switch Box
Flan Dayfarrana 20.70	
Elan Performer39.79 Fantavision34.96	Switch Box
Fantavision34.96	Vidi Amiga
Impact Business Graphics.49.91	X Copy Har
Lights, Camera, Action47.84	PACKAGES
Movie Setter51.98 Photon Paint 2 1MB57.96	Appetizer.
Photon Paint 2 1MB57.96	Graphics St
Pixmate38.87	Home Office
Pixmate	Publishers (
Sculpt Animate 4D Junior 84.87	The Works
Sculpt Animate 4D Pro 1MB.329.82	PROGRAM
The Director49.91	AMOS Basic
Turbo Silver99.82	Aztec C Pro
Turbo Silver Terrain Disk 18.86	
Video Titler 1MB84.87	Devpac 2
Vidishroms 10.79	Forth
Vidichrome	GEA Pagin (
Zoetrope 1MB/9.81	GFA Basic I
HARDWARE	GFA Basic II
1.3 A500 Kickstart ROM 29.90	Hisoft Basic
23 Pin D Type Socket4.83	Hisoft Basic



UTILITIES



Richard & Angela Howe: Applied Research Kernel Corve Farmhouse, Corve Lane, Chale Green, Ventnor, PO38 2LA, U.K. Visitors are always welcome by appointment

POST UK £0 (1st class recorded), Special Delivery £2.99 (call before 1pm). Securicor £6.90 (call before 1pm). egistered Air Mail to Europe £5/item, World £12/item (software only). Please call about carriage on heavy items V.A.T. Prices include UK VAT at 15% except for books. Books are zero rated.

CHEQUES London Sterling payable to A.R.K. please. Some ordinary cheques may require clearance. EXPORT & BFPO Remove UK VAT (=Price/1.15) except on books which are zero rated.

AVAILABILITY Most items listed are usually in stock. Others can usually be obtained within two days. DESPATCH Usually within 94 hours on stock items, 79 hours on non-stock but available items

12.88 19.78

WORDPROCESSORS .52.90
 WORLDPROCESSORS

 Kindwords 2
 35.88

 Microtext
 19.78

 PenPal
 99.82

 Protext
 64.86
22.77 .32.89 .69.92 .164.9174.9831.9769.92

STOCK CLEARANCE (Few Only)
AmigaDOS Toolbox (new)29.90
BBS PC Bulletin Board79.81
Deluxe Paint 2 (of bundle) 19.78 Fantavision (from bundle)..24.84 Amikit For Beginners29.90

ARexx Macro Interpreter ...34.96

Lights Camera Action (new) .39.79

Masterpiece Fonts (110!).119.83

SPECIALIST BUSINESS PROGRAMS REQUIRED FOR RESALE

DISCOUNT SOFTWARE

For The Commodore Amiga

WORD PROCESSING Kind Words 2 Protext See "Specials".....£64.95 Protext Working Demo Disc...£5.00 Scribble Platinum.....£41.95 SPREADSHEETS/FINANCIAL DG Calc by Digita£26.95 K-Spread 2 by Kuma£24.95 Home Accounts by Digita ..£20.95 Personal Tax Planner Digita ..£26.95 DATABASES

Malishot (label printing)	£10.90
K-Data	.£24.95
Prodata see "Specials"	£55.95
Superbase Personal	

BUSINESS SOFTWARE

System 3	£35.95
Invoicing, Stock Control and Cashflow	
Cashbook Controller	£35.95
Final Accounts	
Adds End of Year accounts to	
Cashbook Controller	

Cashbook Combo£54.95 **GRAPHICS & VIDEO**

Pagesetter 2	£75.95
Fantavision	
Deluxe Paint III	£59.95
Deluxe Video III	£59.95
ZVP Video Studio	£89.95
Rendale 8802 Genlock	£189.95
VIDI-Amigasee	"Specials"
Digiview Gold v4	£119.95
Digidroid	£64.95

A.M.O.S. MJC PRICE £32.95 SOLIND

000110	
Mastersound budget sampler	£34.95
Trilogic Stereo Audio Digitiser	
software not supplied	£34.95
A.M.A.S.	
sampler & Midi interface	
Trilogic Midi Interface	
in/out/thru, 2 x out/ thru swit	
Aegis Sonix	
Audiomactor 2	CEO OF

Music X NEW LOW PRICE FULL VERSION £75.95

£45.95

Dr. T's Midi Studio.

BOOKS AND MANUALS

Amiga for Beginners	£12	.95
Elementary Amiga Basic	£14	.95
Advanced Amiga Basic	£18	.95
AmigaDos (Burgess)	£14	.95
Amiga Machine Language .:	£14	.95
Amiga Assembly Language	£14	.45
The C Language, by K & R	£22	.95

SPECIALS

PROTEXT V4.2

The Word Processor for those who want to handle words quickly and efficiently. No graphic fonts, just speed and a whole host of features aimed at producing text with the minimum of effort. Include Spell Checker and very powerful Mail Merge routines. Our favourite WP program on any machine. Includes manual and binder

RRP £99.95 Our Price £64.95

PROTEXT DEMO DISK £5.00

PRODATA

Arnor's new database for 1 meg machines and above. Features excellent data layout facilities, including a wide range of printer effects, and uses many Protext editing commands.

Our Price £55.95 BBP £79.95

PRODATA DEMO DISC £5.00

PRO-PACK! **Protext and Prodata** £114.95

MEMORY EXPANSIONS

1/2 Meg internal expansions for A500's. Real time clock and disable switch included. £42.95

VIDI-AMIGA

The best value video digitiser for the Amiga. Grabs 16 shade mono images from any domestic VCR (with composite video output) to be saved as IFF files .

NTSC VERSION£79.95 PAL VERSION.....£95.95

VIDI-CHROME

Colour software upgrade for VIDI. Uses mono video camera and Red, Green and Blue filters (supplied) or takes still colour source if used with RGB splitter.

RRP £19.95 OUR PRICE £15.95

ROMBO RGB SPLITTER Takes still colour video signal and extracts red, green & blue for Vidi-Chrome or Digiview. MJC PRICE £59.95

HITACHI VIDEO CAMERA

Basic black & white CCTV camera ideal for digitising and producing colour images with VIDI-CHROME. £219.95

VIDI-PACK

VIDI-AMIGA (PAL) VIDI-CHROME HITACHI VIDEO CAMERA £299.95

SECOND DISC DRIVES

Quality external second 3.5" disc drive including disable switch. **INCLUDES VIRUS-X UTILITY** £62.95

PROGRAMMING

Hisoft Basic	£58.95
Extend for above	£15.95
Devpac version 2	£39.95
Lattice C version 5.	£169.95
Amiga Logo	£39.95
,	

EDUCATIONAL SOFTWARE

Fun School 2, 2-6 years£12.9
Fun School 2, 6-8 years£12.9
Fun School 2, 8-12 years£12.9
Answerback Junior Quiz 6-11 .£14.9
Discover Math, 10 and over£15.9
Discover Numbers, 6+£15.9
Discover Alphabet, 6+£15.9
•

Mavis Beacon Typing, 12+..£23.95

ACCESSORIES

3.5" disc head cleaner£3.95
A500/2000 printer lead£6.95
Neoprene Mouse Mat£3.95
Quickjoy 2 Turbo Joystick£9.95
Comp. Pro 5000 Joystick£13.95
Joystick/Mouse Switch£12.95

DUST COVERS

All nylon fabric, not PVC type	
A500 keyboard	£3.95
Philips CM8833 Monitor	£4.95
Star LC10, Mk1, 2 or Colour.	£4.95
Star LC24-10	£4.95
Panasonic KXP1081	£4.95
Panasonic KXP1124	£5.95
Citizen 120 D and Plus	£4.95

PRINTERS

All prices include 12 month guarantee, cable, a ribbon, VAT and delivery.

CITIZEN 120-D PLUS £139.95 Cheap 9 pin, with 2 NLQ fonts.

PANASONIC KXP-1081 £159.95 Well built, NLQ in all sizes.

STAR LC-10 Mono £169.95 Four NLQ fonts, double height.

STAR LC-10 Mono MARK 2 £189.95 Fast version of the mark 1.

STAR LC-10 COLOUR £219.95 Best value colour printer

STAR LC24-10 £249.95

PANASONIC KXP-1124 £259.95 Much better than the 24-10

CITIZEN SWIFT 24 £314.95 olour Upgrade Available

RIBBONS

COMPATIBLE RIBBONS
Star LC-10 Mono
Panasonic KXP-1080/1081
Citizen 120-D/Plus
Amstrad DMP2000-3250 Amstrad LQ35

£7.00 a pair £3.95 each

Manufacturers original ri	bbons
Star LC-10 Mono	£4.95
Panasonic KXP-1080/1081	.£5.95
Star LC24-10	£5.95
Star I C-10 Colour	\$5.95

Heat Transfer Ribbons

Produce Iron on transfers.				
Citizen 120-D	£12.95			
Star LC-10 Mono	£13.95			
Star LC-10 Colour	£19.95			

DISCS 2 E" CONVINC BILLY

O.O GOITTIOTO BOLK				
GUARANTEED				
10 for£6.95				
20 for£13.00				
50 for£29.95				
BRANDED SONY 3.5" MF2DD				

10 for....£10.95 20 for....£20.95

REPLACEMENT POWER SUPPLY

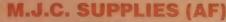
Provides up to 30% more power to cope with add-ons £39 95

Please Note All prices include VAT and postage in the UK.

5

We ONLY advertise products actually available at time of going to press. We DO NOT advertise products "Due Shortly" as they rarely are!!

Overseas orders welcome - Please write for prices CALLERS WELCOME! MON-FRI 9.30am TO 5pm SAT 10am TO 4pm



40a Queen Street, Hitchin, Herts. SG4 9TS Tel: (0462) 420847/421415/432897 for enquiries / Credit Card Orders





Before we start examining this month's software in detail, a few interesting little notes. The main difference between this month's selection and the last little bundle (Amiga Format Issue 12) is that this time around the programs are all of British origin, rather than being imports from America.

This may not seem to make a great deal of difference, but in fact it very often means that the homegrown product was written by an enthusiast – or someone with a good eye for a market – who noticed that the programs available on import were not doing what was needed.

This month's programs tend to have a good deal more 'educational' bias, with a good emphasis on proper learning techniques. Many of them were written by parents who could test them on their children

or by parents with a wide-ranging experience of the school system – often as teachers.

As a last little note, it may be interesting to know that the Let's Spell series from Soft Stuff were converted to the Amiga using AMOS, the new easy-to-use programming language from Mandarin, and that both the At Home and At the Shops are available in French language versions too. Anyway, now let's look at the software.

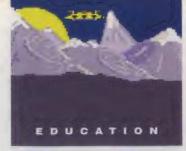
ANSWER BACK JUNIOR QUIZ ANSWER BACK SENIOR QUIZ Kosmos Software £19.95 each

Quizzes are always popular, nowhere more so than on a computer where they have educational as well as entertainment value. These offerings from Kosmos are similar in look, but the Junior quiz is aimed at 6-11 year olds, whereas the Senior quiz is a bit trickier (12 years and up).

The programs run off a main menu. The first control that you'll select will be the Help/Instructions, because all the box contents tell you is to load the program. The next step is to check out what quizzes are available: there are a total of 15 on each of these Kosmos babies. The program will tell you what's available and the subject of each quiz. Only one quiz can be loaded at a time though – a pity given the Amiga's memory size and the fact that the program doesn't seem to use a lot of it.

On the Junior quiz the subjects are Fun-Sums, Brain Strainers, Word Fun, Science, Lucky Dip, Nature, Take









In the second of our occasional glances at Amiga educational software, a few homegrown products are tested out by **PAT MCDONALD.**



ANSWERBACK QUIZZES

LEFT: The Senior quiz program in operation.

BELOW: Answering a Junior quiz question.

BOTTOM: The Junior sub-game in progress.





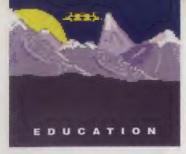
your Chance, TV/Films/Theatre, Books and Poetry, Around the World, The British Isles, Games and Sport, Famous People, Music and Nursery Rhymes and (quite an important one here at the end) Spelling.

The Senior disk has History, Sport, Know your Language, Science, Natural History, Astronomy, Pot Luck, Legends and Mythology, Films/TV/Theatre, Discoveries and Inventions, Art and Architecture, Literature, Famous People, Music and finally Geography.

If in those two lists there are one or two repetitions, rest assured that the actual questions are different in each category. There is a total of 50 questions per quiz, which works out to 2.66 pence per question. Quite a reasonable rate, really.

You get a choice of question formats – multiple choice, true or false, complete the answer – and you can have an assortment of each. Quizzes can be completed in sequence (starting and ending at certain questions), but a random selection is more fun.

Both programs offers you the chance to play a subgame after answering a question correctly. The Junior version gives you the chance to save a damsel in distress from a fire-breathing dragon by dropping a brick on its nose from a hot air balloon. Different, I'm sure you'll agree. The senior version is a more conventional "shoot the UFO down with lasers". They're not terribly hot games but they do make the puzzles less monotonous.



If you want you can change the questions, making up your own guizzes. This is guite useful as one of them is now outdated on the Senior version: George Stephenson is now on the back of a fiver, not the Duke of Wellington. New quizzes can be saved onto disk and quizzes from either version can be freely interchanged.

Conclusion

There's nothing outstanding at all about these programs. They strike me as cheerful and honest, though, scarce commodities on the Amiga scene. If you're looking for a quiz program for yourself or a young child, then Kosmos can supply the goods.

Given the Amiga's capabilities, though, it has to be said that it wouldn't be at all difficult for another company to write a much better program. It's debatable whether any rival company is really that fussed.

PROF PLAYS A NEW GAME **Prisma Software** £29.99

This is part one of the "Play and Read" series. It has a modest goal to teach a child a simple vocabulary of 63 words. The way it goes about this task is a bit complicated, so I hope you're sitting comfortably...

First off, you have to get the pupil to listen to the included audio tape. This was recorded by Patricia Hayes in a very twee little-girl voice and was found to be dangerously tedious to adults. However it does introduce the ideas of reading very well to a non-literate child.

Then there's a game of five sections that is played on the Amiga. All that's required is to guide a little red man around a few boxes onscreen, using a joystick and/or the keyboard. He has to match words, which means running up to it, pressing the spacebar, and then finding the duplicate which is somewhere else on the screen. And pressing the spacebar again to make contact.

The Amiga tells the player just what this strange word sounds like. This is the crux of the program, it's what the game is all about. Believe it or not, the object of the whole exercise is to get children to read books.

Once each game section is complete, whoever played the game should know all the words used in the relevant picture book which are all included in the box. The first three

LET'S SPELL

PROF PLAYS

A NEW GAME

RIGHT: The actual

game is a process of

matching up words.

the reward screens.

BELOW: A selection of

RIGHT: The nitty-gritty of the game is having a guess at the word that matches the object in the middle of the screen. The teddies and the thermometer will give help.









99

books each teach nine words, whereas the last two will hammer in 18 new ones.

Conclusion

The game part of it seems pretty mindless to adults, but children don't tire of it so easily. Mind you, they don't have to select each word once, but many times. This makes it doubtful that a child would finish all the books without a great deal of adult encouragement.

On the other hand, if your child doesn't show much enthusiasm for reading, then this particular piece of educational software could give them that spur - but only if you're willing to out the hours in too





LET'S SPELL AT HOME LET'S SPELL AT THE SHOPS Soft Stuff £19.95 each

As if you couldn't guess, these two are designed to help young children with their spelling. Interestingly they're for children between the ages of four and nine, which is quite a gap as far as spelling is concerned.

Depending on the location (At Home or At the Shops) the Amiga kicks off with a picture of all the places you can visit. So, down at the shopping mart, you can visit a DIY store, a clothes shop, a traditional toymaker's or a greengrocer.

You move the figure of a girl to the relevant place, and the view turns to the inside. Once you're inside, then you can select different objects laid about the shop. The screen magnifies on the object, and this is where it gets a bit complicated...

Let's assume that the pupil has walked into the toyshop and clicked on a puppet. Apart from the magnified view of the puppet, two teddy bears and a teddy's face are displayed, along with an alphabet. If the child isn't very good at spelling, clicking on the small teddy will switch to simple mode.

The word for the object is displayed, and the child has to select the right letters. If a letter is correct, then it will be filled in. So, the child will gradually pick up what the word is for each object.

Clicking on the big teddy will mean that the pupil has to guess the word in full. To help them, pressing the nose of the big teddy will display the word. Another help option is a thermometer. This can be switched on or off, and when on will tell children if they're hot or cold when selecting the next letter.

Let's Spell at Home is virtually identical, except that the locations are all based around a house and the objects are everyday household items. So sending the girl round the back of the house will bring up such objects to guess as a lawnmower or a garden hose.

One nice thing about the series (there is another one from Soft Stuff called Let's Spell Out and About, but we haven't a review copy yet) is that they're integrated. If the child gets bored of looking round the shops, by putting in a disk from one of the others in the series they can go straight to the relevant scenario without having to reboot the Amiga. Nice touch.

Conclusion

It sounds a bit clumsy, but this system is really just a computerized version of a coloured, illustrated spelling book. Based on a principle like that, it should be a real winner. The ability to cope with children who don't know a lot about the alphabet is another well thought-out aspect of it.

It has to be said though that the onscreen help is difficult enough for an adult to understand. You're going to have to spend some time with the child getting them used to how the system works. Once they've learned that, there's quite a lot of exploration

	.R	SOFT.	W	ARE	
3D Pool4th & Inches	£13.90 £14.90	Dungeon Quest	.£16.90 .£17.90	Leader-Collection	£16.90 £13.90
4th & Inches	£17.90 £20.90	Dynamite Dux Dynamite Dux Dyter 07 E-Motion East V West Elite Escape from the Planet	£13.90 £16.90	Leader-Collection Legend of Fear Leisure Suit Larry 2 Leisure Suit Larry Looks 4 Love License to Kill Life & Death	£16.90 £22.90
Football	2.16.90	Elite	£13.90 £16.90	Leisure Suit Larry Looks	£16.90
After the War	£13.90	Escape from Singles Castle	.£13.90 .£28.90	License to Kill	£13.90 £16.90
Airborne Ranger Aladdins Magic Lamp Alltime Favourites Alien Syndrome (RAD) Altered Beast	£16.90 £8.50	Escapology Eskimo Games European Challenge	£16.90 £16.90	Light Force Light Force Limes of Napoleon Live & Let Die Lombard RAC Rally Lord of the Rising Sun Lost Dutchmans Mine	£16.90 £13.90
Altered Paget	£19.90 £8.50	European Challenge European Space Shuttle	£16.90 £22.90	Live & Let Die	£13.90 £16.90
American Dreams	C16.00	European Space Shuttle European Superleague Executioner Extra Time Eye of Horus F16 Combat	.£13.90 .£16.90	Lost Dutchmans Mine	£16.90 £16.90
Amiga Gold Hits	£17.90 £16.90	Eye of Horus	.£17.90 .£16.90	M1 Tank Platoon Magic Marble	£19.90 £16.90
Amiga Gold Hits	£16.90 £11.90	F16 Falcon	£20.90 £19.90	Lost Patrol M1 Tank Platoon Magic Marble Magnum 4 16 Bit Compilation Manhunter Man Little	£19.90
Aquanaut	£13.90 £16.90	F19	.£16.90 .£13.90	Man Utd	£19.90 £16.90
Aquanaut Aquaventura Archon Collection Arctic Fox Armada Armalyte	£8.50 £8.50			Marble Madness	£8.50 £16.90
Armada	£19.90 £13.90	Fantavision	£25.90	Mavis Beacon's Typing Mega Pack 2	£19.90 £16.90
Art of Chess Astaroth Angel/Death Astro Marine Corps	£16.90	Fast Lane	.£13.90 .£16.90	Midnight Resistance	£16.90
		Fifth Gear	£13.90		
Awesome Axels Magic Hammer Balance of Power 1990	£14.90 £16.90	Final Command	£16.90 £16.90	Mindroll Moonwalker Mr Heli	£16.90 £16.90
Balistix	£14.90 £16.90	Firestone Fire Brigade	.£16.90 .£16.90	Mr Heli Muscle Cars Mystery of the Mummy	£9.90 £16.90
Balistix Bar Games Barbarian 2 Bards Tale 2 Bards Tale 3	£16.90 £16.90	Fire. Firestone. Fire Brigade First Contact. Flight Simulator 2 Football Director 2 Football Manager 2/Exp Kit Football Mana 2 Comp. Football Manager 2 Football Football Manager 2 Football Football Manager 3 Football Fo	.£16.90 .£22.90	Nevermind New York Warriors	
Basketball College	£16.90 £16.90	Football Director 2	£11.00 £13.90	New York Warriors New Zealand Story Ninja Spirit Ninja Warrior	£13.90
Basketball Basketball College Basketball Side View Batman Caped Crusader	£13.90 £17.90	Football Man. 2 Comp	.£13.90 .£13.90	Ninja Warrior North & South	£13.90 £16.90
Battlochoss	C16.90	Forgotten Worlds	.£14.90	North & South Oil Imperium Omega	£16.90 £19.90
Battle Hawks	£17.90 £16.90			Omega Ooze Operation Wolf Operation Thunderbolt Oriental Games Out Run Outlands Overlander P47 Pacland Pacmania	£16.90 £16.90
Battletech Beach Volley Beast 2 Beast	£16.90	Full Metal Planet Fun School 2 6-8 Fun School 2 Over 8 Fun School 2 Under 6 Fun School 3	.£13.90 .£13.90	Oriental Games	£13.90 £16.90
Beast	£23.90 £16.90			Outlands	£13.90
Betrayal	£16.90 £20.90	Future Tank (Budget)	£8.50 £16.90	P47Pacland	£16.90 £13.90
Bionic Commands Black Tiger. Blood Money Bloodwych Bloodwych Data Blue Angels	£8.50 £16.90	Galdregon's Domain	.£13.90 .£13.90	Pacmania	£13.90 £13.90
Blood Money	£16.90	Games Summer Edition Gazza's Super Soccer	.£16.90	Paris Dakar	£16.90 £13.90
Blue Angels	£11.00 £16.90	Gazza's Super Soccer Gemini Wing Ghostbusters 2 Ghouls & Ghosts	.£16.90	Personal Nightmare	£19.90
Boradino	£19.90	Giants	£20.90	Pictionary	£13.90 £16.90
Bomber Mission Boulderdash (Wicked)	£11.00 £8.50	Gold of the Americas Golf of the Realm Goldrush	.£16.90 .£13.90	Pipe Mania	£16.90
Bomber Mission Boulderdash (Wicked) Breach 3 Brides of Dracula Bridge Player 2150 Bruce Lee Lives	£16.90 £13.90	Goldrush	.£16.90 .£22.90	Paciand Pacmania Pacmania Paperboy Paris Dakar Passing Shot Persian Gul Persian Hightmare Phantasia 3 Plottonary Pictonary Pipa Mania Pirattes Player Manager Player Manager Police Quest 2 Police Quest 2 Populous	£16.90
Bridge Player 2150 Bruce Lee Lives Bubble Plus	£19.90 £16.90	Graffiti Man (Budget)	£13.90	Police Quest 2	£16.90
Budhokan	£16.90 £16.90	Grand National	£16.90 £13.90	Postman Pat	C12.00
Budhokan Cabal California Challenge Carrier Command Carthage	£9.50 £16.90	Gravity	.£16.90 .£16.90	Powerboat Powerdome Precious Metal	£16.90 £16.90
		Gunship	.£16.90 .£13.90	Premier Collection	£16.90
Castle Master	£16.90 £13.90	Hard Drivin Hardball 2 Hawaiian Scenery Disk Heavy Metal	£16.90 £11.90	Premier Collection 2 Premier Collection 3	£19.90 £19.90
Champions of Krynn Chase HW Chessmaster 2000 Chessplayer 2150 Chicago 90 Chronoquest 2	£16.90	Hell Raider Hell Raiser Here with the Clues Heroes of the Lance Highway Patrol 2	£13.90 £13.90	Premier Collection 3 Prince Pro Tennis Puggsy Pursuit to Earth Quartz RAC Rally Rainbow Islands Rally Cross	£16.90 £22.90
Chessplayer 2150 Chicago 90	£16.90 £13.90	Here with the Clues Heroes of the Lance	£16.90 £16.90	Pursuit to Earth	£13.90 £16.90
		Highway Patrol 2 Hills Far Hole in One	.£16.90 .£16.90	RAC Rally	£16.90
Classic Invaders Cloud Kingdom Cluedo Master Detect	£16 90			Rampage	£13.90 £16.90
		Horse Racing Horse Racing Stable Hostages Hot Rod	£11.00 £16.90	Rampage	£16.90 £16.90
Colony Colorado Colosus Bridge Colossus Chess 4 (X)	£16.90 £16.90	Hot Rod Hound of the Shadow	.£16.90 .£16.90	Red Storm Rising	£16.90
Colossus Chess 4 (X)	£16.90 £13.90	Hound of the Shadow Hoyes Book of Games Hunt for Red October	.£22.90 .£16.90	Renaissance	£13.90 £16.90
Commandos Commo Racer	£16.90 £16.90	Hunter Killer Hyper Action	£5.50 £16.90	Risk	£13.90
Compilations 2 Conflict in Europe Conqueror Continental Circus	£16.90	Iceman	.£16.90 .£8.90	Robocop	£13.90 £19.90
Continental Circus	£13.90 £8.50	Hyper Action Hyperforce Iceman Ikari Warriors Impossamole Indiana Jones (Adv) Indiana Jones (L.C)	.£13.90 .£16.90	Renaissance Rick Dangerous Rings of Medusa Risk Rorkes Drift Robocop Rocket Ranger Rock N Roll Rolling Thunder Rolling Thunder Run The Gauntlet Running Man Salari Guns Samurai Scapeghost Scapeghost Scavenger	£13.90 £8.50
Count Duckula	£16.90 £16.90	Indiana Jones (L.C) Infestation Infogrames Tri. Pack Intellitype	.£13.90 .£16.90	Run The Gauntlet	£13.90 £16.90
Cyberball	£13.90 £13.90			Safari Guns	£13.90
Daily D. Horse Racing	£16.90 £13.90	International + International Arcade International Wrestling Interphase	£16.90 £9.90	Samurai	£19.90 £13.90
		International Wrestling	£16.90 £16.90		
Danies Inompson Damocles Dan Dare Dan Dare Dan Dare 3 Danger Freak Darius	£13.90 £13.90	Ironlord	£16.90	Scrambled Spirits	£13.90 £13.90
Darius	£16.90	It Came From the Desert (1 meg Italy 1990	£16.90		
Dark Fusion	£14.90 £13.90	J. Nicklaus Course Vol.1 J. Nicklaus Golf	£9.90 £16.90	Sherman M4	£16.90
Darius Dark Century Dark Fusion Datastorm Day of the Viper Days of the Pharaoh Days of Thunder Deep Space (Klassix) Defenders of the Earth Deja Vu 2	£16.90 £16.90	J. Nicklaus Int. Courses 2 J. Nicklaus int. Courses 3 J.N Ult. Golf & CRS Design	29.90	ShogunShoot em UpShuffle Pack Cafe	£19.90 £19.90
Deep Space (Klassix)	£22.00 £8.50	Japan Scenery Disc	£11 90	Shuffle Pack Cafe	£13.90 £16.90
Deja Vu 2	£16.90 £8.50	Jet	£13.90 £19.90	Silkworm	£13.90 £19.90
Deluxe Strip Poker	£13.90	Journey Jumping Jackson Keith the Thief Kennedy Approach	.£13.90 .£16.90	Silkworm Sim City Skidz Skidz Slayer Sleeping Gods Lie Snoopy Soccer Game Solding 2000	£13.90 £13.90
Demons fomb Demons Winter Detector (Budget) Dogs of War Double Dragon 2 Dr Dooms Revenge	£16.90 £8.50	Kennedy Approach Kenny Dalglish	£16.90 £13.90	Sleeping Gods Lie	£16.90 £16.90
Double Dragon 2	£13.90	Kenny Dalglish 2 Kick Off	£13.90 £13.90	3010181 2000	210.00
Dreses Flight	C10.90	King Arthur	£16.90 £16.90	Space Ace	£27.90 £13.90
Dragon Ninja Dragon Scape	£16.90 £13.90	Kennedy Approach Kenny Dalglish Kenny Dalglish 2 Kick Off Kid Gloves King Arthur Kingdom of England Kings Quest 2 Kings Quest Triple Pack Kiay	£13.90 £13.90	Sonic Boom	£16.90 £16.90
Dragon Spirit	£13.90 £19.90	KIGA	C1C.00	Space Quest 3	£22.90 £19.90
Dragon Ninja Dragon Scape Dragon Spirit Dragons Breath Dragons Lair (1 meg) Dragons of Flame	£28.90 £16.90	Knight Force Knight of Legend Knights of Crystallion Krypton Egg Krystal	£19.90 £19.90	Speed Ball	£16.90 £13.90
		Krystal	£19.90	Star Command	£19.90
Drivin Force	£8.50	Lancaster Laser Squad (Blade)	£13.90	Starbreaker	£19.90

FREE FIRST CLASS SAME DAY POSTAGE & PACKING on all U.K orders (Europe add £1 item). Please send guaranteed cheque or P.O. to:- H.R. SOFTWARE, Amiga Dept 32 Granville Gds, London W5 3PA, stating computer make and model. Tel enquiries: 081-993-6471. *Mail Order only. No callers please.*

(x commodore



Prices Include VAT, delivery & warranty.

All systems are tested before despatch.

All systems are tested before despatch.

All systems are tested before despatch. ■ Amiga B2000 With A2286 PC-AT€ 1695 board and 20MB autoboot hard disk On-site maintenance options available.

£3725 £3425 £2825 Managa A3000 25Mhz 100MB Amiga A3000 25Mhz 40MB M Amiga A3000 16Mhz 40MB

Amiga B2000 latest UK model, £895 with 1.3 Roms and 1MB chip-RAM

WE SHIP EVERY A3000 WITH 2MB CHIP RAM AS STANDARD



■■■ B2000 + AT Bridge Board + 40MB autoboot hard disk £1895!

Why not enjoy the free Teletext databases with the MicroText Teletext adaptor... Fully programmable, with Fastext facility, Instant access to last 16 pages, double page view,



telesoftware loader, auto-start/background
operation... Pages can spoken, printed as ASCII or graphics, saved as ASCII or IFF files...
And it turns your 1081/1084/8833 monitor into a digital TV! Available now for only £1391

PAGESTREAM 2 PRODRAW 2 EXCELLENCE 2... in stock now!

and the same of th	■ Lattice C v5.05	£159.95		
///ppopu	JCTIVITY Dos-2-Dos	34.95		
PRODU	■ Amlga Logo	39.95		
///	■ C64 Emulator v2	39.95		
	SuperBack 2	39.95		
1/3	■ Workbench v1.3 Enhancer	14.95		
■ SuperBase Personal 2	Relational database power, without programming!	59.95		
" " Professional v3	"The Rolls-Royce of Amiga databases" (NCE)	154.95		
■ SuperPlan	Pro Spreadsheet with business graphics, time planne	49.95		
Maxiplan 500	Fast Amiga spreadsheet with text/graphics/speech	59.95		
Arena Accounts				
Personal Tax Planner	Personal Tax Planner UK Income Tax computation program, from Digita			
■ CanDo	Can YOU do it without CanDo?	139.95		
■ Excellence 2	New improved version of high performance WP	169.95		
Pagestream 2	With major new features incl. Agfa/Adobe fonts	149.95		
Professional Page v1.3	Includes WP, Desktop, colour separations, CAD	169.95		
CG Outline Fonts	35 fonts for ProPage, ProDraw, PageSetter 2	139.95		
Pagesetter 2	£64.95 M A/C Basic v1.3	109.95		
Publisher's Choice	64.95 Hisoft Basic v1.05 plus Extend	74.95		
■ ProText v4	■ ProText v4 79.95 ■ Amiga C for Beginners			
Pen Pal	■ Pen Pal 79.95 ■ Amiga C Advanced Programmers			
■ VizaWrite Desktop v2	49.95 System Programmer's Guide	32.95		

£49.95! SUPERPLAN half-price special offer, while stocks last...



IF YOU WANT IT TOMORROW... CALL US TODAY! ON 081-546-7256

Prices are POST FREE & include VAT Prices are POST FREE & Include VAI.
Order by phone with your credit card, or send cheque/PO or your credit card number. Official orders welcome. We despatch same day by FIRST CLASS post. Please allow 5 days for delivery of hardware orders. Prices are quoted without the control of the prices are provided to the control of the prices are provided to the control of the control of the prices are provided to the prices are prices are provided to the prices are prices are provided to the prices are prices are provided to the prices are prices are provided to the prices are Ref. A72 subject to availability:



FREE!! **HIGH QUALITY** SOFTWARE

Learn how to write it, Get a Recognised Qualification and get a good job.

One 'A' level, good GCSE's or equivalent could qualify you to study for a BTEC

Higher National Diploma Software Engineering

LEA grants and sponsorship with extra money and guaranteed job offers available.

Contact: WATFORD COLLEGE Hempstead Road, Watford, Herts. WD1 3EZ Tel (0923) 57613 (24Hrs)

AMAZING NEW DEALS!!

3 1/2" disks made by Sony with a 2 for 1 life time guarantee

10 31/2" Disks	£6.75
25 31/2" Disks	£15.00
50 31/2" Disks	£28.00
100 31/2" Disks	
80 capacity boxes	26.50

Games				
RRP	1PH			
£20£14	1.00			
£25£18	3.00			

Most released games in stock



10 CHANDERS CT EATON 0603 NORWICH COMPUTER SPECIALIST NORFOLK

FRE	E B	LA	NK DISK V	HTIV	EV	ERY G	ME	VIS	A
AMIGA	RRP	OUR	AMIGA	RRP	OUR	AMIGA		RRP	OUR
AMIGA 688 Attack Sub	24.99	.16.10	Italia '90 (1 meg)	19.99	.13.10	AMIGA The Plague		94 99	16.10
AMOS - The Creator	49.99	.34.95	Italy 1990			Thunderstrike.			
Anarchy	19.99	13.10	Ivanhoe	24.99	.16.10	Time Soldier			
Astro Marine Corps	24.95	16.10	Kharlaan	24.99	.16.10	Tower of Babe			
Battlemaster	29.99	19.35	Kick Off 2	19.99	.13.10	Toyottes		19.99	.13.10
Bomber Mission Disk (1Mb)	14.99	10.25	Klax	19.99	.13.10	Treasure Trap .		24.95	.16.10
Chase HQ	24.99	16.10	Last Ninja II			Triad Vol 3		29.99	.19.75
Colorado			Life And Death			Turrican			
Combo Racer			Magnum 4			Ultimate Golf.		24.99	.16.10
Crack Down			Manchester United			Ultima V		29.99	.19.35
Cyberball			Manhunter 2			Venus - The Fly			
Damocles			Matrix Marauders			Warhead			
Escape Robot Monstera			Midwinter			Web of Terror			
F19 Stealth Fighter			Necronom			Wings			
F29 Retaliator			Newromancer (1Mb).			World Boxing	vlanager	19.95	13 10
Falcon Mission Disk II			Pirates			O FILE	CIDE	Dial	
Fighter Bomber			Player Manager			3.5" D	שש/כי	DISI	KS
Fire & Brimstone			Projectyle			Quali	ty Unb	randed	d l
Flood			Red Storm				,,		_
Ghosts 'n' Goblins (1 MB).			Resolution 101			10	-	£4.9	2
Harley Davidson			Rorke's Drift			50	- f	£23.4	5
Herewith The Clues			Rotox						_
Heroes Quest			Shadow Warriors			100	- f	£44.9	5
Heroes Guest			Sly Spy			Boxec	lin 10	I'c Mi	th
Imperium			Teenage Mutant Turtles						
Internat, 3D Tennis			The Keep			labels.	Guar	ante	ed.
Italia '90 (0.5 meg)									
FREE QUALITY BLANK DISK WITH EVERY TITLE ORDERED									

Customer No. (if known) Name	Payment: Cheque	e/PO/Access/Visa
Address		
Card No	Exp:	
ITEM	AM	OUNT
	+ FREE DISKS TOTAL	
Send Cheques/PO payable to 'Best By	te' or phone Credit Card Hotlin	ne 0273 746467

Mail order only. Prices include 1st class Post & VAT. 24 hour despatch

BEST BYTE (AMF14), 48 Nevill Avenue, Hove BN3 7NA

Access			D	ATA	PL	οΣ,
	129	Bath	Road,			19

Berkshire SL1 3UW Telephone: 0753 35557

All prices excluding VAT and delivery AMIGA HARDWARE

Amiga Batman Pack£317.00 New Amiga Flight of Fantasy ...£317.00 New Amiga Batman Plus 5 GamesPack Plus Jovstick£345.00 AMIGA ACCESSORIES85.00 A501 - 512K Ram + clock TV Modulator Mouse Mat ...4.00 Amiga to Philips Lead Amiga to Printer Lead10.00 Quickshot II/Stick. ..10.00

1MB 5.25" External Floppy Drive.....95.00 NEW AMIGA CLASS OF '90'S

Including: Art & Design feature, Word Processing, Desk-Top Publishing, Spreadsheet, Music, Logo and BBC Emulation ...439.00 PHILIPS MONITORS

CM8833 14" RGB/CVBS mon......199.00 CM 8833 14" RGB/CVBS mon .219.00 (including cables).. PRINTERS Amstrad LQ3500 DI..... .189.00 Amstrad DMP4000 .. Amstrad LQ5000 DI.

..295.00

Citizen 180E. 127.00 New 24pin swift 24..255.00 Colour upgrade for swift ... 42.00 All Citizen printers come with 2 year

DOT MATRIX RANGE

	warranty	
Epson	LX400	139.00
Epson	LX850	182.00
Epson	FX850	310.00
Epson	FX1060	410.00
Epson	LQ400	215.00
Freen	1.0500	249 00

High Street,

Swindon, Wiltshire Telephone: 0793 488448

Epson LQ550 Epson LQ850 .. 445.00 Epson LQ860 Epson LQ1060..... ...654.00

HEWLETT PACKARD Thinkjet......265.00 Quietjet+ 412.00 443.00 Deskjet +549.00 Rugged Writer.

..865.00 Star LC24-10 + lead & stand

 NEC P2 +
 239.00

 NEC P6 + 80 character
 389.00

 NEC P7 136 character
 523.00

 Colour upgrade kit
 69.00

 Panasonic KXP 1081
 119.00

 Panasonic KXP1124 + lead & stand215.00 Sheetfeeder. ...89.00 Panasonic KXP1624 (132 column) .349.00 Panasonic KXP1180......144.00
Panasonic KXP1595......319.00 Panasonic KXP1540... NEW MANNESMANN TALLY LAUNCH OFFER MT81 (dot matrix)......115.00 Sheetfeeder......62.00 Serial I/F..... .35.00 RIBBONS KXP1081/1090/1/2..... DMP 2000/3000/3160......

.2.80 DMP 4000 PCW 8256/LQ3500 . 4.40 4.50 Panasonic 3131/MP26 FX800/RX/MX/FX80 3.15 FX1000/FX/RX100..... NL 10 .. 4 40 LQ500/800/850..... LC10 .. 4.40 Professional Repairs Carried Out.

to do. If there's one thing to motivate children, it's finding out something new for themselves.

THINGS TO DO WITH WORDS Soft Stuff £19.95

What an uninspiring title for a useful teaching aid! Rather than depend on the usual "What is a baby hare called?", this program tries to get young children thinking about how to break sentences down into their meanings. Three totally different games are included.

Anagrams takes a list of normal word, picks one at random and displays it as an anagram. Using the mouse to select words from an onscreen alphabet, the pupil has to work out the anagram.

Sentences works on similar principles. A sentence is jumbled up onscreen, and the idea is to select the words into the right order. After a few unsucessful attempts the computer takes pity and puts everything into the correct order.

Word Hunt was my favourite. First, a word is selected from a list. After that, you have to make up as many words as you can out of the letters that made up the original word. It's not as easy as it sounds, but the computer will display all the possibilities, highlighting the ones you couldn't work out.

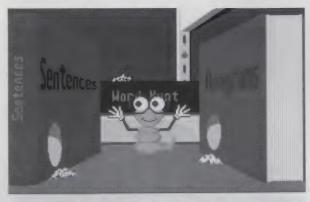
Conclusion

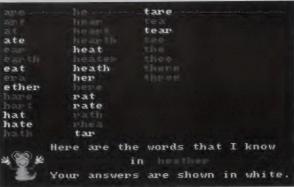
The way that the programs try to help you out is noteworthy, and the ideas behind the product are well implemented – everything is designed to get your child to think about written English, rather than learning by rote. Sometimes the 'End' icon is badly placed: I found myself getting thrown out of some sessions because the pointer was just touching it. That gripe apart, it's one of the better pieces of educational software that I've seen aimed at 5-12 year olds.

THINGS TO DO WITH NUMBERS Soft Stuff £19.95

Soft Stuff strikes again with a short compilation of three programs designed to help children get better acquainted with numeracy. Written for children between the ages of five and ten years, it proved to be something of a disappointment.

The way of getting into each is a little bit strained. The Amiga displays a sequence of icons, one after the other. Depending on which you want,







you hold down the right mouse button to select your choice. Why they couldn't have had a nice, simple Workbench folder with some cute logos I'm blessed if I know.

Time Teller helps children to practice their knowledge of the 24-hour clock system. A standard clock face is displayed with a time on it. The pupil has to enter the time in 24-hour format on a calculator-type keypad using the mouse.

Of course, to get it right you have to know whether the clock is AM or PM. This information is flashed on the digital clock face before a time is entered. The analogue clock face differs down to the minute, so it can be tricky to get it exactly right.

Train Fill involves putting the right number of passengers on a train. The



THINGS TO DO WITH WORDS

TOP: The Bookworm introduces the games.

MIDDLE: Making words from 'heather' in the game Word Hunt.

BOTTOM: Anagrams is under way.

THINGS TO DO WITH NUMBERS

ABOVE RIGHT: Train Fill in progress.

BELOW: Time Teller.

cold, warm or hot. When the correct hiding place is found, it overheats and explodes less than dramatically.

EDUCATION

correct number of passengers is dis-

played, and then you have to build up

the train to that level. The difficult part is that you're only allowed to use

certain numbers of passengers. For

example, you might need to make a

train of 33 travellers using blocks of

ing game than real education. A grid

of books is put up on the screen.

From the bottom left corner, move-

ment is possible a given number of

steps to the right and up. Once there

you can look for an errant bookworm

who's hiding somewhere on the grid.

If you're wondering just what you're

looking for, the answer is a book-

is placed on the right of the screen,

and it shows whether the guess is

To help guide you, a thermometer

worm. Obvious really.

Book Search is more of a guess-

four and three.

Conclusion

The whole package strikes me as window dressing. Yes, it can help children who don't know how to tell the time by a digital watch (there can't be many of those nowadays), who aspire to work for British Rail or want to be able to search a grid logically.

A child could probably get more useful skills from playing Battleships with pen, paper and a friend than from this lot. I can't deny that there must be some people it can't help, but the audience is surely much smaller than for many pieces of educational software.

Suppliers:

These are the 'phone numbers of the suppliers of the software reviewed on these pages.

Kosmos Software, Dunstable 0525 3942 Prisma Software, Chester 0244 326244 Soft Stuff Software, Tonbridge, Kent 0732 351234



WINDROF

20 copies of Prisma's Play and Read software up for grabs

PLUS: £5 discounts for 50 runners-up

Educational software is a real growth area on the Amiga and in the fore-front are Prisma Software with their Play and Read – Learn to Read with Prof series. On the preceding pages you'll find a review of Part One, Prof Plays a New Game, and here you have the chance to win the next in the series – Prof Makes Sentences.

Prof Makes Sentences introduces to children the art of creative writing, where Prof the cartoon character is on hand to help and give a few surprises along the way. Children may not run straight off and start penning Shakespearean sonnets but they will have discovered that writing sentences can be fun.

There are 20 first prizes of *Prof Makes Sentences* and for 50 runners-up a £5 discount off the purchase of it. All you have to do to enter is answer the three questions below about *Prof Plays a New Game* – all the answers to which can be found in the review on the preceding pages.

HOW TO ENTER

Write the answers to the following three questions and on the back of a postcard or stuck-down-envelope and send it to: **Prof Comp, Amiga**

Format, 30 Monmouth Street, Bath BA1 2BW. The entries should reach us by September 17th and don't forget to include your name, address and phone number on the postcard.

QUESTIONS

- 1. How many books are included in Prof Plays a New Game?
- a) 2
- b) 4
- c) 5
- 2. How many words will children be able to read after completing *Prof Plays a New Game?*
- a) 50
- b) 63
- :) 62
- 3. Which famous actress reads the story on the cassette?
- a) Patricia Hayes
- b) Meryl Streep
- c) Thora Hird

RULES

Employees of Future Publishing and Prisma Software are not allowed to enter. The judges' decision is final. No correspondence will be entered into.







School problems?

Whatever your age, whatever your subject let your computer help you learn.

Our range of leisure and educational software is now available for most home and business computers.

Subjects include ...

French, German, Spanish, Italian, English History, Geography, Science, General Knowledge. Football, First Aid, Sport, England, Scotland, Natural History, Junior Spelling and Arithmetic

Kosmos are specialist producers of Educational Software designed to help you enjoy learning from your computer. Our programs even allow you to add your own lesson material.

Write or telephone for a FREE 20-page BROCHURE

of our Educational & Leisure software Please state your computer type

Kosmos Software Ltd, FREEPOST (no stamp needed) DUNSTABLE, Beds. LU5 6BR Telephone 05255 3942 or 5406







NO COMPUTER IS COMPLETE WITHOUT A DUST COVER

Protect your Amiga with a dust cover from the BBD Professional Range.

Made from best quality proofed nylon that has been treated with a flame retardant and an anti-static inhibitor. BBD Dust Covers are tastefully finished with contrasting piping. They never crack, discolour, tear or fade. They can be washed and ironed. So confident are BBD of the quality that they give a noquibble guarantee with every cover.

BBD dust covers are not expensive and all our prices include VAT and P&P

Amiga 500, Keyboard only.....£5.00 Amiga 1000, one piece cover.....£8.00 Amiga 2000, two piece set£11.00

In addition to the above BBD offer a wide range of other covers. These include printer covers from only £5.50 Why not contact us for further details

Dept. 34, The Standish Centre, Cross Street, COVERS Standish, Wigan, WN6 0HQ



Telephone: 0257 425839 ext 34

Fax: 0257 423909



£9.95

£16.95

£14.95 £14.95 £12.95

£14.95 £14.95

£14.95 £14.95

£14.95 £16.95

£16.95 £16.95 .£17.95 .£17.95 .£17.95

£18.95 £18.95

£22.95 £22.95 £24.95 £24.95

£21.95 £29.95

£29.95

£29.95 £29.95

Sheer Perfection in Computer Protection



RAMSOFT

AMIGA & ST SPECIALISTS

UNIT 1 DRAKE HOUSE 160 DRAKE STREET ROCHDALE, LANCS OL16 1PX TEL: 0706 43519

A500 FLIGHT OF FANTASY PACK

A500-Computer, TV Modulator, P.S.U. K/S 1.3 W/B 1.3 Mouse, Extras & Tutorial Disks, all leads and manuals.



ONLY £369.00

A500 BAT PACK

Only £359.00 + TEN STAR PACK

R.S. PRICE ! £379.00

Plus Photon Paint II * Only £389 *

COMMODORE 1084S PHILIPS CM 8833!

£249.00 £249.00

Class of 90's Now in stock Only £519

MONITOR PACK. Buy any pack & we will offer a Philips CM8833 FOR ONLY £239 inc lead

NAKSHA MICE....ONLY £38.00 CONTRIVER MICE ONLY £26.00



PRINTERS



STAR LC 10 MONOONLY £159 STAR LC 10 COLOUR.....ONLY £199 PANASONIC KXP1124ONLY £259

PRINTER RIBBONS ALL MAKES AVAILABLE. LOW PRICE EG: STAR LC-10 MONO £4.49 Col - £7.50

ALL OUR PRINTER PRICES ARE INCLUSIVE OF LEADS

RAM Expansion, inc. Clock & Switch...£69.95...*...3.5" External Drive...£75.00

TDK 3.5" Disks X10...£12.00...*...Posso 150 Cap Disk Box...£18.00

LC10 Dust Cover...£8.50...*...Monitor Cover...£9.50...*...A500 Cover...£7.00

Please Call for prices on items not listed

ACCESS VISA STYLE

Please note, all our prices include VAT & Courier Delivery.

All hardware items despatched within 48 hrs, dependent on availability & cheque clearance prices subject to change without prior notice at any time. Personal callers welcome.

We are open from 09.00-17.30 Monday to Sat. E & OE.



RAMSOFTS BOOK SHOP ***********

Amiga DOS Quick Reference (Abacus) Motorola 68000 Programmers Ref Man (Motorola) Amiga Desktop Video Guide (Abacus)....NEW!..... Amiga DOS Manual (Bantam)
Programming the 68000 (Sybex)
Amiga Disk Drives - Inside & Out (Abacus) (D)
Programmers Guide to the Amiga (Sybex)
Amiga Programmers Handbook (Sybex)
Amiga Programmers Handbook, Vol 2 (Sybex)
Amiga Hardware Reference Manual: - A/W...NEW*
Amiga ROM Kerne
Reference Manual. Libs/Davs. A/W...NEW.*

Reference Manual, Libs/Devs. A/W...NEW..*

Amiga ROM Kernel Ref. Man.: Includes & Autodocs (A.W. NEW!) Amiga C for Advanced Programmers (Abacus - NEW!) Amiga System Programmers Guide (Abacus) (D)

Books Marked (D) have a Disk Available, £9.95...Disk may be purchased separately.

Addison/Wesley Special:- Set of Technical Reference Manuals Only £70.00..*

****** RAMSOFT EXTRAS ******

SOFTWARE SPECIALS

Singes Castle - £32.00. **Photon Paint 2: - £25.00** Black Magic:-£9.99

We will give up to 50% Discount on most items of software. Items not in stock are available next day, subject to release schedule.

**** Please ring for price on other titles.. All prices are inclusive of postage

BASEBALL SHIRT



Description	Price	Order No
Medium	£6.50	AM106
xtra Large	£6.50	AM107

AMIGA BINDER



Keep your issues together in this high quality binder with the Amiga Format logo printed on the front and spine.

.95 AM108
e Order No

F29 RETALIATOR



Take to the skies in the Amiga Format Gold winner. Superb 3D graphics and lasting appeal in this combat/flight simulaton.

TDK DISK



Ten TDK 3.5" disks with a free TDK Limited Editon SA90 cassette worth £1.99.

lium	£6.50	AM106	One binder	€4.95	AM108	Description	Price	Order No	Description	Price	Order No
a Large	£6.50	AM107	Two binders	£9.00	AM109	F-29 Retaliator	£17.95	AM163	TDK Disk	£11.95	AM167
				_							

FORMAT

THE LATEST AND GREATEST PRODUCTS AT THE BEST POSSIBLE PRICES!



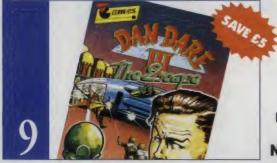
HOW TO ORDER... JUST MAKE A NOTE OF THE PRODUCT NAME AND ORDER NUMBER AND FILL IN THE ORDER FORM OPPOSITE... OR RING **OUR HOTLINE NUMBER** ON 0458 74011





VISA 0458 7401





PRICES INCLUDE POSTAGE, PACKING AND VAT **NO HIDDEN EXTRAS**



SEE OUR AMAZING SUBSCRIPTION OFFER OF **FREE SOFTWARE ON PAGE 135**

DEVPAC 2 HiSoft



Program directly in 68000 assembly language. See the Coverdisk demo on Issue 9 then buy the product at this remarkable price.

DAN DARE III Virgin



Taken from the blockbuster movie; see our fabulous game demo on Coverdisk 12 Playing the part of the hero, be sure to conquer the evil Mekon and his Treens.

YOLANDA Millennium



As the offspring of the mighty Hercules Yolanda has to re-enact the twelve tasks. Fifty randomly selected levels plus a special trainer all together in Steve Bak's latest platform extravaganza.

AMOS Mandarin



The creator. A Superb development language for creating games, educational programs - almost anything! Comes complete with AMOS Sprites 600.

Devpac	£44.95		Dan Dare III				£12.99			£35.95	
Description	Price	Order No	Description	Price	Order No	Description	Price	Order No	Description	Price	Order No

VIRUS KILLER CRL



Be sure your machine, disks and programs are safe. Detect and destroy the viruses leaving your software safe.

escription	Price	Or	
irus Killer	€9.95	A	

RESOLUTION 101 Millennium



rder No Description

Since the passing of Resolution 101, no criminal is safe. Your objective is to drive around town and pick up these guys before they pick you off. A super-fast game with amazing graphics.

QUARTET Microdeal



See Coverdisk 12, then buy this package to create your own music. "A music package with a difference" – **AF**

Order No

Price

M161	Resolution 101	£18.99	AM166	Quartet	£37.95	AM165

Order No Description

MAIL ORDER

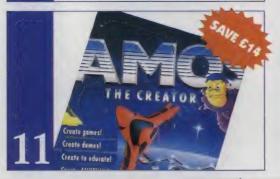
Price

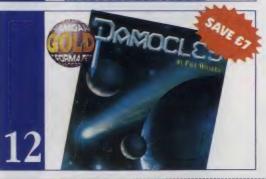












BACK ISSUES



Want to complete your collection of the ultimate Amiga magazine? Back issues come complete with disks – prices include the postage and packing!

AMIGA FORMAT

ISSUE	PRICE	ORDER NO
ISSUES 1 - 7	SOLD OUT	SORRY!
ISSUE 8	£3.45	AMF08
ISSUE 9	£3.45	AMF09
ISSUE 10	£3.45	AMF10
ISSUE 11	£3.45	AMF11
ISSUE 12	£3.45	AMF12
ISSUE 13	£3.45	AMF13

BACK ISSUES



Or why not grab copies of the very rare original ST/Amiga Format? Hurry, there are limited stocks!

ST/AMIGA FORMAT

ISSUE	PRICE	ORDER NO
ISSUE 1-10	SOLD OUT	SORRY!!
ISSUE 11	£3.45	AM211
ISSUE 12	£3.45	AM212
ISSUE 13	£3.45	AM213

DAMOCLES Novagen



Damocles takes players to a doomed planet, which only they can save. In a self-contained 3D solar system it's a real time race to head off a comet and avert certain catastrophe.

Expiry date

Description	Price	Order N
Damocles	£17.95	AM169

AMIGA FORMAT MAIL ORDER

Name	Description	Price	Order No
Address			
Postcode			
Phone number		,	•
Method of navment (please cir	role) Access • Visa • Cheque • PO	TOTAL ORDER	• For overseas order

Method of payment (please circle) Access • VISA • Cheque • PO

TOTAL UNDER

Call Nikki for prices on 0458 74011

SEND THIS FORM TO: Amiga Format, Future Publishing Ltd, Freepost, Somerton, Somerset, TA11 7BR

Please make all cheques payable to

Future Publishing Limited

No stamp required if posted in the UK, Channel Islands or the Isle of Man

DELTA LEISURE (UK)

Unit 27/28 Trent Business Centre, Canal Street, Long Eaton, Notts, NG10 4GA Telephone (0602) 460760

1/2 Meg (Amiga) Upgrades only £35.00 (without clock) (with switch)

Disk Boxes

3.5	inch	40	cap	£3.95
3.5				£5.95
5.25	inch			£5.95
ALL	LOC	CKAE	BLE	WITH DIVIDERS

A	miga Mouse	£19.95
	tari ST Mouse	
	BM Compat	
	louse Mats	

Mice & Mats

SPECTRUM P.S.V's ONLY £5.95

Disks

3.5	DS/DD	135 TPIonly	39p ea
5.25	DS/DD	48 TPIonly	25p ea
5.25	DS/DD	96 TPIonly	29p ea

ALL 100% ERROR FREE PIN No

Joysticks

Quickshot I	£5.95
Quickshot II	£6.95
Quickshot Turbo	£7.95

OTHERS FROM £2.95

VISA

ALL PRODUCTS CARRY AN UNCONDITIONAL - 3 MONTH - MONEY BACK GUARANTEE AMIGA + ST EXTERNAL DISK DRIVE ONLY £59.95 ea.

All Prices Include Postage & Packaging & VAT. For Fast and Friendly Service Phone

Delta Leisure (UK) Ltd on 0602 460760

Reach the top with ...

:0

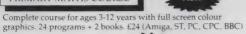




Self-Tuition Courses

World leaders - Hons graduate/teacher authors - At all major shows - £5 off total for 2, £10 off for 3









A-level step-by-step course of 24 programs. Full screen graphics for calculus. £24 (Amiga, CPC, BBC)

MICRO MATHS

Complete course taking beginners to GCSE in 24 programs on 59 topics + 2 books. £24 (Amiga, ST, PC, PCW, CPC, BBC)

MICRO FRENCH

Complete course taking beginners to GCSE, with real speech & graphics adventure game, 24 programs + 2 books. £24 (Amiga, ST, PC, BBC).

MICRO ENGLISH

Complete course taking age 8 years to GCSE English Language, with real speech. Also for EFL. It covers punctuation, spelling and much more. 24 programs and 2 books at £24 (Amiga, PCW, CPC, BBC).

Send coupon and cheques/PO's or phone orders or requests for free colour poster/catalogue to:

LCL (DEPT AMF)THAMES HOUSE, 73 BLANDY ROAD, HENLEY-ON-THAMES, OXON RG9 10B



or ring 0491 579345 (24 hrs)



Name	••••	 	
Title		 	
0			

3.5" DSDD DISKS 39p each inc labels

ALL DISKS ARE GUARANTEED 100% ERROR FREE ☆ ☆ ☆ FREE PD SOFTWARE WITH ALL DISK ORDERS ☆ ☆ ☆ (OUR SELECTION OF THE MOST RECENT AND BEST DEMOS)

Amiga 500 Batman Pack£340	3.5" Sony 10s£8.70
Flight Of Fantasy Pack£340	5.25" Xidex 10s£2.80
1084 Colour Monitor£220	100 x 5.25" Box£6.40
External Disk Drive£58	80 x 3.5" Box£6.40
	A500 Dust Cover£3.00
512K RAM + Clock£54	Mouse Mat£3.00

Add VAT and £3 P&P per order.

Send cheques or postal orders to:

Quantum Computers 38 The Parks **Minehead** Somerset TA24 8BT

FULLY QUALIFIED ENGINEERS ON SITE TO UNDERTAKE REPAIRS OF COMPUTERS, DISC-DRIVES PRINTERS AND MONITORS

ALL WORK GUARANTEED FOR 3 MONTHS. FREE ESTIMATES. Tel: MARK OR MARTIN (0527 85) 3374 **BUSINESS HOURS Mon-Sat 9am to 8pm**

15a ALCESTER ROAD, STUDLEY, WARKS B80 7AG



F-29 Features

On the letter headed "F-29 bugs", from Roger Musson: while most of the 'glitches' you describe are indeed bad programming, there is one 'glitch' which is in fact totally in keeping with the game: the reason that your radar cannot pick up SAM sights is because real radar can't either; the SAM sights are ground emplacements and are thus hidden from radar by hills and the curvature of the earth.

S J A Clark Birkenhead, Merseyside

Disk Lebensraum

We recently purchased the Amiga 500 Batman Pack for programming and graphics. We like drawing in *DPaint* but now, after saving a few paintings, we found when we want to save another one, a requester appears saying '*DPaint* is full'. We have this same trouble with the Extras Disk. Is there any chance of putting our paintings or programs on a blank disk (a backup menu) instead of making more copies of *DPaint* or Extras? Or do we need more meg?

Dominic and Emil Rowe Tadworth, Surrey

You can save files such as those from DPaint onto any blank formatted disk – you shouldn't save them onto the master disk as there is always a great danger of corrupting it. The instructions for saving files and formatting disks can be found in the manual.

In a Bind over Binders

I have been reading Amiga Format since it split from ST/Amiga Format. Now I have 12 issues and a binder to keep them in. But if you keep making the magazine bigger, how can you expect us to get them into the binder? At the moment I have 10 issues in the binder but have trouble with the last two. Any suggestions that might help?

Andrew Gebbie Ferniegair, Hamilton

A few days ago I received my copy of the July issue of *Amiga Format* – without doubt the BIGGEST EVER! as you so rightly assert. I have been a reader since Issue 1 in July 1988 of *ST/Amiga Format* and still have 13 issues of this publication as well as the first year's copies of *Amiga Format*.

12 copies of ST/Amiga fit easily into your binder (or they did 12 months ago) but, try as I might, I cannot fit 12 copies of Amiga Format into my current binder.

I must admit the July issue got slightly wet in the post and possibly swelled somewhat, but alas I

LOIG STATE TO SEE TO SE TO SEE TO SE

Address your communications to **BOB WADE** care of **30 Monmouth Street, Bath, BA1 2BW.** If it's good enough to be printed and escape the Origami treatment it could win you a T-shirt and binder.

cannot complete this final copy in its binder. My fingers are not as supple as they might be for I must be one of your oldest readers – well past four score years and ten! Is this a record?

Don't make your magazine smaller, try to increase the capacity of your binders, for it is undoubtedly one of the best computer magazines on the market. Long may you prosper. NIL CARBORUNDUM ILLEGITIMAE!

Vic Eva Cleveleys, Blackpool

When the original binders were ordered we did not foresee the explosion in the size of AF. However, we are now ordering wider binders into which you should be able to fit 12 issues.

United they Fall

I noticed that on the inside cover of Issue 12 you had the word 'Football' to indicate your article about said game on Page 81, but above it was a photo of Leeds United playing Sheffield United. I have tried very hard but I can't quite see the connection. Was it perhaps an in-joke?

Matt Greenslade Keynsham, Bristol

Dangerous words when both those teams have been promoted to the First Division – are you perhaps a City or Rovers supporter?

Going Public

Having just received my subscription copy of *Amiga Format*, and having read the article on

Business Software there was one item raised in the article which I thought I should comment on.

In the glossary of terms to that article, it refers to a public company (PLC) as one whose shares are traded on the stock exchange. This is not the case, and for a private company to convert to a public company only requires some technical adjustments to the company's articles of association and a minimum share capital.

Unfortunately, many people are confused by this (as I suspect the author of your glossary was), into thinking that a public company is rather more substantial, and, by implication, more secure than a private company. This is certainly not the case. Many small companies are converting themselves to become public companies so that they do appear to be rather more than they really are and certainly a number of computer suppliers are adopting this approach.

I would not want your readers to think that dealing with a company with the letters PLC after its name automatically means more security than dealing with a private company.

M J Hagen Spicer & Oppenheim, Bristol

Fastism?

What the hell is going on? I saw the FAST adverts (p189) in the July edition asking people to pass information on to FAST and I am absolutely appalled.

Have we really gone back to the days of Hitler Youth when children reported their own parents and family for rewards. I have read AF since day one, but I will have to seriously reconsider buying any future issues.







NEW TITLES SENT DAY OF RELEASE

SOFTWARE

24 HR HOTLINE 0407 760609

1 UPPER PARK STREET, HOLYHEAD, GWYNEDD LL65 1HA
IMMEDIATE DELIVERY OF STOCK ITEMS BY FIRST CLASS POST

GAMES	
GAMES	
688 Attack SubAdidas Championship Football	£16.75
Adidas Championship Football	£16.75
After the War	C12.75
A.M.C.	040.75
Amos	£34.90
Anarchy	£16.75
Back to the Future 2	£16.75
Batman the Movie	£16.75
Battlehawks 1942	£16.75
Battle Master	£16.75
Battle of Austerlitz	C16.75
Dattle Of Austerlitz	.210.75
Battle Squadron	£16.75
Beach Volley	£16.75
Beverly Hills Cop	£16.75
I Black Cauldron	116 /5
Black Tiger	£16.75
Bloodwych	£16.75
Black Tiger Bloodwych Bloodwych Data Disk	60.00
Davis Manager	C40.7F
Boxing Manager	213.75
Bridge Player 2150	£19.90
Bridge Player 2150	£16.75
Carrier Command	£16.75
Chambers of Shaolin	£16.75
Castle Master	£16.75
Chase HQ	£16.75
Chessmaster 2100	C16.75
Chrono Quest 2	C10.73
Chrono Quest 2	.£19.90
Cloud Kingdoms	£16.75
ColoradoColossus Chess 10	£16.75
Colossus Chess 10	£16.75
Combo Racer	
Conflict in Europe	£16.75
Conqueror	.£16.75
Crackdown	£13.75
Cyberball	£13.75
Damocles	£16.75
Dan Dava 3	C12 7E
Darius Darius Dark Century Debut Defenders of the Earth	L13.75
Darius	£13.75
Dark Century	£16.75
Debut	£16.75
Defenders of the Earth	£13.75
Donble Diagon >	1.3. / 3
Dragons Breath	£19.90
Dragon Flight	£19 90
Dragon Flight	£16.75
Dragons Lair	£21 00
Dragons Lall	010.75
Dragon Ninja	
Drakknen	£19.90
Drakkhen Dr. Doom's Revenge	£16.75
Dungeon Master	£16.75
Dynamic Debugger	£16.75
Dynasty Wars	£19.90
Dyter 7	€16.75
Flite	£16.75
EliteEmlyn Hughes Int. Soccer	C16.75
Limyii Hugiles IIII. Soccei	C16.75
E-Motion	

	_	_	-
GAMES			
Escape from Robot Monsters	C1	3	7
Escape from Singes Castle	00	1	0
Escape Iron Singes Castle	24	21.	2
European Super League	21	0	. /
F16 Combat Pilot	21	6	./
F16 Falcon	21	19	.9
Falcon Mission Disk	21	13.	./
F19 Stealth Fighter	٤1	16	.7
F29 Retaliator	٤1	16	.7
Fighter Bomber Data Disk	£	:9	.9
Fire and Brimstone	£1	16	.7
First Contact	£1	16	.7
Flimbo's Quest	£1	16	.7
Football Manager + Exp. Kit	£1	13	.7
Football man, World Cup Ed	21	13	. 7
Forgotten Worlds	£1	13	7
Full Metal Planet	91	16	7
Gazza's Super Soccer	61	16	7
Ghostbusters 2	91	16	7
Ghouls 'n' Ghosts	61	16	7
Ghosts 'n' Goblins	61	3	7
Grand National	61	3	7
Carrier	C1	0	-/
Gravity	Z 1	0	. /
Gridiron	21	0	. /
Gunship	21	0	./
Hammerfist	£	6	./
Hotrod	٤1	16	. /
Hard Drivin'	£1	13	. 7
Heavy Metal	٤1	6	.7
Herewith the Clues	٤1	6	.7
Heroes of the Lance	£1	16	.7
Hero's Quest	22	24	9
Highway Patrol 2	£1	16	.7
Hillsfar	٤1	16	.7
Impossamole	£1	13	.7
InfestationIndy Last Crus. Adventure	£1	16	.7
Indv Last Crus. Adventure	£1	16	.7
Interphase	€1	16	7
International 2D Tennis	21	16	7
Italy 1990 (U.S.G.). It Came from the Desert (1 meg only). I.C.F.T.D. Data Disk (Ant Heads)	81	16	7
It Came from the Desert (1 meg only)	61	ia	C
ICETD Data Dick (Ant Heads)	2	0	0
haphan	64	0	7
Kick Off 1 or 2	C1	0	. /
Kick Off Extra Time	. 2. 1	13	. /
KICK Off Extra Time	2	0	1 00
Kid Gloves	1	0	./
Klax	.E	13	./
Knightforce	£1	16	./
Knights of Crystallion	£	19	. 5
Last Ninja 2	£1	16	. 7
Last Ninja 2 Leisure Suit Larry 3	£2	27	.0
Lombard RAC Rally Lords of the Rising Sun	21	16	.7
Lords of the Rising Sun	£1	19	.0
Lost Patrol	£1	16	.7
Magic Marbles	21	12	. 5
Manchester Utd	21	16	.7
Microprose Soccer	€1	16	.7

GAMES			
Midnight Resistance	81	6	7!
Midwinter	61	9	91
Ninia Spirit	£1	6.	7
Ninja Spirit	£1	3.	7
North And South	1911	6	10
Nuclear War	61	13	70
Onslaught	£1	16.	7
Operation Thunderbolt	.£1	16.	7
P4/ Inunderboit	. 2.	In.	/:
Pacmania	£.	16.	7:
Paperboy	£:	13.	7:
Pictionary	.£1	16.	7
Pipemania	.£1	13.	7:
Pirates	.£	16.	1:
Player Manager	.£	13.	4
Populous Populous Lands	.2	16.	/:
Powerboat USA	2	6.	91
Projectile	.2	10.	7
Poinbow lolando	.2	0.	71
Rainbow Islands	.2	0.	0
Resolution 101	.L	19.	71
Rick Dangerous	.Z.	16.	71
Rings of Medusa	.2	0.	01
Porko's Drift	.2.	16	71
Rorke's Drift	.2	16	71
Pun the Countlet	2	16	71
Run the Gauntlet	2	16	71
Scrabble De Luxe Seven Gates of Jambala	5	3	7
Seven Gates of Jambala	5	16	71
Shadow of the Beast	5	16	71
Shadow Warriors	C .	16	71
Sherman M4Shoot 'em up Construction Kit	F	16	7
Shoot 'em up Construction Kit	5	19	90
Sim City	£	19.	90
Sim City Terrain Editor	5	9.	90
Sleening Gods Lie	51	16	71
Sly Sny	51	16	71
Sonic Boom	£1	16.	7
Sonic Boom Space Ace Space Harrier 2	£3	31.	90
Space Harrier 2	£1	16.	7
Strider	. 2	Ib.	1:
SILAX	.2	13.	7:
Ctunt Car Basse	0	16	71
Supercars	£.	13.	7
Super League Soccer	£	16.	7
Swords of Twilight	£.	16.	7
Super League Soccer Swords of Twilight	.E'c	21.	90
Tennis Cub	.2.	10.	13
Test Drive 2	E.	16.	7:
The Cycles	.£	16.	7:
Their Finest Hour	£	19.	9
Theme Park Mystery	£	6.	1
Time Soldier	£.	16.	/:

GAMES
Toobin
COMPILATIONS
AMERICAN DREAM£16.75 Hostages, Bubble Ghost, Operation Neptune, Super Ski.
EDITION ONE £16.75 Double Dragon, Xenon, Gemini Wing, Silkworm.
GIANTS£19.90 720, Rolling Thunder, Gauntlet 2, Outrun, California Games.
PREMIER COLLECTION 3£19.90 Archipelagos, Quadralien, Cybernoid 2, Battleships
MAGNUM 4£19.90 Afterburner, Batman - Caped Crusader, Operation Wolf, Double Dragon.
PRECIOUS METAL£15.95 Crazy Cars, Zenon, Arkanoid, Revenge of Doh, Captain Blood.
WORLD CUP YEAR 90£16.75 Kick Off, G. Lineker's Hotshot, Tracksuit Manager.
TRIAD III£19.90 Speedball, Bloodmoney, Rocket Ranger
HEROES£19.90 Licence to Kill, Star Wars, Running Man, Barbarian 2.

BUSINESS

Arena Accounts	£119.90
Devpac Amiga 2	
Hisoft Basic	
Home Office Kit	
K-Comm	£20.90
K-Data	£34.90
K-Spread 2	£41.90
Lattice C Vers. 5	£159.90
Mailshot	£17.50
Mailshot Plus	
Prodata	
Protext	
Publishers Choice	
SBA Cash	£55.90
SBA Xtra	
Superbase Professional	£174.90
Word Perfect	£159.90

EDUCATIONAL

£13.75
£13.75
£13.75
£13.75
£13.75
£13.75
£13.75
£19.90
£15.95
£15.95
£15.95

JOYSTICKS

Cheetah 125	£7.50
Cheetah Mach 1 Autofire	£8.50
Cheetah Starprobe	£10.95
Competition Pro 5000	£10.95
Competition Pro 5000 clear	.£11.75
Competition Pro Extra	£12.50
Competition Pro Glo (Red or Green)	£13.50
Konix Navigator	£10.95
Konix Speedking Autofire	£8.50
Quickjoy 2	£7.50
Quickjoy 3 Supercharger	£9.95
Quickjoy 5 Superboard	£14.95
Quickshot 2 Turbo	£8.50
Sureshot Clear	£8.50

UK AND BFPO DELIVERY FREE, ELSEWHERE £2.00 / GAME FOR EXPRESS AIRMAIL PLEASE MAKE CHEQUE/PO PAYABLE TO KEY SOFTWARE

DISKS ETC.

3.5" Box of 10...

BLANK DISKS DOUBLE SIDED DOUBLE DENSITY

3.5" Box of 20 3.5" Box of 50 3.5" (Sony) Box of 10 3.5" (TDK) Box of 10 5.25" Box of 10	£34.90 £14.50 £14.50 £4.90
5.25" (TDK) Box of 10	H LOCK
80 Capacitý	£7.90 £8.90
A500 Dust Cover	£4.95 £4.95

GAME		COST
	TOTAL	

NAME	
ADDRESS	***************************************
•••••••••••••••••••••••••••••••••••••••	***************************************
••••••••••••	***************************************
	AE 00/00

SEND TO: KEY SOFTWARE, 1 UPPER PARK ST., HOLYHEAD, GWYNEDD LL65 1HA

I am bloody disgusted with this advert and ask you to set aside any profit you make from this advert and withdraw it immediately. I have sent a letter to the trading standards association to see what the rules are regarding threatening letters of this type.

An AF Reader Concerned for Human Rights

FAST adverts are run for free in an attempt to combat piracy – we get no revenue from them. I think your reaction to the ads is overly dramatic because they are clearly targetted at a particular criminal activity and one which will require proof of guilt. We are not talking about any form of racial, sexual or religious persecution.

Fear and Loathing of Disks

I have just finished reading the July Issue 12 of Amiga Format, a thing I have become increasingly loathe to do. The reason for my disaffection is disk problems and the procedures for replacement of them. I have returned two disks in the last few months and have yet to receive replacements or even acknowledgments.

I did follow the directions given for replacements and accepted the fact that there were bound to be some defective disks in the thousands made. I will even accept that it was just bad luck that it happened twice to me, but it is stretching my patience to think that both disks were lost by the Post Office and you did not receive either of them. Your comments and replacement disks would make me, again, a regular reader or even subscriber.

Peter Black Stevenage, Herts

We have just changed disk duplicators and no problems should be encountered getting replacements, but getting copies of older disks is more of a problem – we'll chase up your disks and try to get copies sent to you.

Gis a Job!

I have seen quite a few advertisements in the magazine lately advertising for programmers and graphic artists, a notable one being the Ocean advert on Page 154 of Issue 12. Quite a few of us 'normal' people are not programming experts like Dave Jones. Even less of us can be considered as really good artists such as Jeffrey Hilbers and Jeff Godfrey of It Came From The Desert fame.

But what most of us have a good chance of doing is designing. Of the three, designing is the cheapest and most available to



people with half a decent imagination and an extra twist to make a good game, such as Mike Singleton, who is also blessed with programming talents. (How about doing Eye of the Moon for the Amiga incorporating an overhead world editor?)

Personally, I think that the design of a game is as important as the graphics, programming or sound because once the initial impact of these slick effects have passed you by then the game begins to show its true colours. I have heard that this was the case with Defender of the Crown although Cinemaware have become much better since then. Perhaps, as well as advertising for programmers and graphic artists, why not run a competition along the lines of programming or game design with the prize being the demo or game design being turned into a full price or budget game (complete with royalties) as the top prize amongst others for runners up.

Paul Chan Halifax, West Yorkshire

Over the Rainbow

Just a few lines to ask why Amiga Format has missed out on some of the more interesting reports and articles I've seen recently?

The interview in *Psychiatric Puzzler Weekly*, in which they had an in depth interview with Bub (or was it Bob?) of *Rainbow Islands* fame, is a case in point. The deep trauma of constantly being attacked by every denizen of this game while upholding the right of every Western brat to be upwardly mobile, hardly makes the rewards of cake, fruit and designer trainers seem worthwhile. It now seems it

may take years of psychiatric counselling before he will be able to overcome his multiple persecution phobia; in which he believes all spiders, snails, worms and newly-hatched birdies are out to kill him.

This persecution complex, together with his rabid hatred of Judy Garland (who he claims sings to him in his sleep), should be brought to the attention of your readers, who will then see how this innocent wee lad has been psychologically damaged for the sake of careless entertainment.

Another article you might care to read (I think it was from the September issue of *Yuppie News* (remember them?), claimed that Dennis Thatcher has an old Dragon? Do you know of any other famous computer games addicts?

E A Jones Birkenhead, Merseyside

Wears a Mac?

I am writing to you for details of any Macintosh emulators available for the Amiga. I know similar hardware is available to emulate the IBM PC courtesy of Bitcon Devices, but I haven't been able to find a Mac emulator for the Amiga, although they seem to be in abundance on the Atari ST.

R J Drayton Welton, Lincoln

There is a Mac emulator called A-Max which is about to be upgraded to A-Max II, so check out the News pages in this issue for more details on it.

It's Only a Wind-up

I wonder if you could help me? I have had my Amiga B2000 (with hard drive) for three years and I

am still wondering about some of the Amiga's fantastic functions:

- 1. What does a hard drive do exactly? I have managed to put a small window on it. That's just about all so far, though.
- 2. What is a GURU meditation exactly? My friend tells me that it is a practical joke put in by Commodore.
- 3. What is a startup-sequence? Is it when you turn the Amiga on?
- 4. I have heard that little computer people are real. Someone told me that I have an LCP called Fat Agnus.
- 5. What is fast? Is it similar to fast format on *XCopy 1.3*?

Please help me as I am quite desperate to know the answers.

Andrew Ayrton Arkendale, Nr York

- 1. A hard drive allows you to store great amounts of programs and lots and lots of data.
- 2. It's just a very Californian way of saying your Amiga has crashed in a like totally terminal manner... man. Most heinous.
- 3. Yes.
- 4. Someone was winding you up.
- 5. FAST is the Federation Against Software Theft.

A Word about Words

A word in your ear if you do not mind. Us 40 year-olds are past playing games, well, all the time anyway. What I would like to see is an in-depth look at some of the more professional packages such as I am using — Protext. With Protext there are some examples in the manual for you to type in and try such as the examples to do with mail merge and template files, however, it can be quite complicated to understand the

programming type commands and I am sure there are lots of people out there who would love to have full coverage on these subjects to enable those of us who are not so technically minded to understand the product they are using more.

The examples could be put on the Coverdisk which would save time typing in. As well as other word processors, you could take a look at some spreadsheets and databases.

Martin Fryatt York, North Yorkshire

Tutorials are one of our favourite things and wordprocessors are overdue for a good going over. There are a couple of new ones on the horizon, so expect to see a piece on them in the near future.

Where's Wonderboy?

Is the original game Wonderboy still available? If so, could you give me addresses from where I could purchase it.

Also, is there a cheat for X-Out? If so, could you tell me because I am very frustrated. The reason is that I have seen various cheats and none of them work!

loan Dyer Carmarthen, Dyfed

Wonderboy is available from Activision, who can be contacted on 0734 311666. The cheat for X-Out is to buy the most expensive ship and the cheapest satellite, then discard the satellite over the horned beastie on the right and you'll have loads of cash.

Dutch Guru

To my surprise I read in the last issue, the Guru Meditations isn't much appreciated!? I want a fan club for this great page right now!!!

Is it because I live in Holland I like this page? Do the British not have any sense of real humour? I have also a great tip for the people who don't like this page: Eat it! (I heard Mrs Thatcher liked the strawberry taste in the last issue!)

R Nikkessen Bergen, Holland

Bee Bo Loony

I am writing to you in a state of considerable excitement having designed a game which will run on any computer which uses a 3.5 inch floppy drive! Also, it is very difficult to pirate and, miraculous as it may seem, this intensely addictive game can even be played with the computer's monitor switched off.

The game is called "Bee Bo Bertie" and runs as follows: All you have to do is take a 3.5 inch floppy and slide the little metal cover back. Take a felt tip pen and carefully draw a face (Bertie) on the useless brown stuff inside. Now let the metal cover ping back into place and insert the disk into the drive. After a few moments remove the disk and slide the cover back. WOW! Chances are, Bertie has disappeared. Keep putting the disk in and then removing it and sooner or later Bertie is back and the whole family can shout "Bee Bo Bertie!"

Of course I realise that the felt tip's ink might not agree with the head in the drive but I have found that a little dab of Superglue on a cotton bud, inserted into the drive first, will prevent the head from moving and damaging your Bertie disk.

Incidentally, Superglue is very useful for keeping your collection of disks together. Just glue your floppies into one wodge and use a chisel to prise them apart when needed. Simple.

William Mobberly Wallington, Surrey

You don't by any chance work for a company that repairs Amigas do you William? (NB DON'T try anything William suggests – he's obviously sprained all his brain cells.)

Leaping from Tree to Tree

I have been reading your magazine for several issues now, and thoroughly enjoy all the information in it. However, I have more than a few questions on what is happening with the Amiga (and software

for the Amiga) in the UK. So, instead of wasting the pages of your magazine with thousands of questions, I wouldn't mind exchanging information with some of your readers. I will definitely respond to everyone who cares to write to me.

Gerald Bird 1413 Wascana Street Regina, Saskatchewan, Canada S4T 4J6

PROBLEM CHILDREN: THE RESPONSE

There has been considerable response to the letter from Dr AJ Bell in the last issue on the subject of the effect computers and games have on young people and children, so we devote the next two pages to them.

As a teacher of many years' experience in primary, secondary and adult education and a parent of now grown-up children, I wholeheartedly support Dr A J Bell's professional opinion regarding the adverse effect upon our youngsters of games of horror and violence (August Issue). It is a well known fact that in the escapist's environment the fantasy world becomes the norm and therefore the reality. What is so terrifying is that in this area we are often dealing with the hidden forces of the occult. I cannot think of anyone in the caring professions who would support your view that computer games have no effect on our children and that children "have an excellent grasp of the difference between games and reality".

In recent months, the public conscience has been greatly troubled by the emerging evidence of the links between child abuse and the occult. As the evidence piles up and points towards TV, and more so towards videos and computer games as the generating sources of evil and violence, there could well be a backlash of public opinion. It happened with drugs and it could happen with video and computer games. Therefore those responsible should for their own protection follow Dr Bell's advice and set about drawing up guidelines as to the style and content of the games. That at least would be a start.

It is deprived children who are most at risk. For them, leisure can only be synonymous with escapism when it ought to be recreation. Perhaps a little thought should be given as to how escapism can also be therapeutic and still profitable for those at the commercial end of the business.

At least it is beginning to happen in the hand and machine knitting handicrafts, and also, I believe, in weaving and embroidery. In the USA, a firm called Cochenille Computer Knit Products has produced a program for hand knitters and interfaces for domestic machine knitters using Brother and Studio (Knitmaster) electronic knitting machines. The preferred computer is the Amiga. As a British author, teacher designer of machine knitting, I have been approached by this company to test the Bit knitter interface for the UK market. The program incidentally works in tandem with Deluxe Paint II.

It has become obvious in the last few years that a growing number of women are interested in using home computers for knit design and pattern making. At first I felt it was not my scene but since my husband and I were about to update our word processor, it was not too difficult to choose the Amiga. I am now finding the new design approach quite fascinating. I bought a copy of Amiga Format as a one off. The games pages are lurid and horrific. It is as well to warn you that as more mothers and grandmothers turn to the Amiga to help with their knitting patterns this won't be the last you receive pleading for protection for our children and grandchildren.

Kathleen Kinder Giggleswick, N Yorks

I have been moved to write to you with regards the letter from Dr Bell who I can only describe as a



512 K Expansion for Amiga A500

£42.50

- * Real Time Clock
- *A501 Replacement
- *1 Mbit DRAMS

£38.50

- * Memory Only
- Disable Switch
- Made in U.K.

All Prices include VAT / P&P Why where? Trade enquiries welcome

A500 3.5" Disc Drive £59 * A500 2 Meg Expansion *A\$00 Justcover £3.95 * Amiga SCART Lead £7 Rom V1.3 £29 * Disk Cleaning Kit £3.95* A590 Upgrades per 0.5 meg £35 * Mouse Mat £3.95 Summer Special Offer 3.5" Disk Drive + Board with clock £99.50

3.5" Disks. Quantity of 25 £12.47 (£12.47 plus £1.50 p&p)

Please send a cheque or phone your nearest distributer: 24 Hour order service available. * Same day despatch DS & K DESIGNS LTD. SPEED COMPUTER LTD

Dept AF, Gardener's Row Business Centre

Gardener's Row, Liverpool, L3 6TJ

Tel: 051 298 1666 Fax: 051 298 2074





Dept AF, 41 Weymede, Byfleet, Weybridge, Surrey, KT14 7DQ Tel: 09323 52277 Fax: 09323 52772

SOFTWARE MADNESS LTD

THE AMIGA SPECIALISTS

Are you fed up....?

Buying games that don't live up to their name...? Want an art package but not sure which one...?

Need a database but don't understand the jargonous write ups...? Wouldn't it be better if you could give the programmes a test run before you buy ...? Don't panic...!

Here at SOFTWARE MADNESS we run an exclusive club for Amiga owners. Now you can preview (hire) programmes before you buy.

Joining our exclusive club will not only allow you to preview software, it will also qualify you to make massive saving on all software and hardware alike. (Yes really...!)

Other benefits include

News letters monthly - Access to a huge PD Library - Prices that you cannot beat - All Amiga products can be supplied - and a friendly customer service dep ONLY MEMBERS QUALIFY FOR FULL DISCOUNT

All public domain & shareware = £1.50 per disk Average preview charge on games = £3.00

Average purchase price on games = £16.99

Average discount "on all products" = 40% You do not have to be a member of SOFTWARE MADNESS to purchase any of the

products listed below. The buyers guide also lists all software which is available for preview The Amiga users buyer guide

We at SOFTWARE MADNESS have compiled a complete buyers guide for the Amiga. It list everything available for the Amiga including software - hardware and public domain software. It comes on four - five disks depending on the model of your Amiga and also includes a replacement workbench. Cost = £5.00 Inclusive.

This is something that all Amiga owners should have...!

Hardware		Software	
Batman Pack	£349.99	Music X UK version	£89.99
Flight of Fantasy Pack	£349.99	Videoscape 3D	£69.99
Class of the 90's Pack	£499.99	Excellence	£69.99
B2000 only	£919.99	Pro-Page 1.3	£129.99
Star LC10 Colour	£189.99	X-Copy 2.2+Hardware	£31.99
NEC External Disk Drive	269.99	Chase HQ	£16.99
Halfmeg Ram Expansion	£49.99	Midwinter	£21.99
Amiga 500 Work Station	€49.99	Buggy Boy	26.99

FOR MORE INFORMATION CONTACT STEVE ON LUTON: (0582) 483640 OR ALTERNATIVELY WRITE TO 18 BUTLIN ROAD, LUTON, BEDS. LU1 1LD

We are now exclusive U.K. distributor of SUPER CARD AMI - II £69.99

Copy protection gets tough....we laugh....competition gets tougher....still laughing....software manufacturers....cry!

Super AMI - II is the best most powerful archiving system available for Amiga computers.

Super AMI - II is the new version of our hardware copier AMI - I. Super Card AMI -II installs into the back of your Amiga 500/1000/2500/3000 using external disk drive. All your external drives function normally. Never making it necessary to remove the hardware unit! Completely transparent. Amiga 2000 owners with 2 internal drives, we now have the version you need, Super Card AMI - 2000! The hardware unit installs internally and is completely

Super Card AMI-II also has a verify option, eliminating the need to recopy disks over and over. Super Card AMI. II will copy all 3.5 software made...including (but not limited to) Atari ST. Apple Mac. IBM. and of course Amiga 100% guaranteed! No exceptions....it really works.

Don't be led astray by other products that alter drive speed and clock rates, or by "Digital Image Copiers" Super Card AMI works because of an amazing new process called "Dupliflux" (patent pending) Which actually reads the magnetic fluctuation from the source drive and duplicating it on the destination drive...! Which means fast reliable copies every time!

Lets face it, disk copying times very from disk to disk. oddly formatted disks take longer than others, Super Card AMI - II uses highly advanced routines to obtain the quickest reliable copy possible. Amiga Dos disks can be copied in as little as 37 seconds, but average is about

The response has been overwhelming with our original Super Card AMI. Here are a few letters we received from our customers

C.I.A. User Group....Super Card AMI does it all ! We tried every known publisher ! Tested 4 different external drive manufacturers! This is the best copier any of our members ever experienced ! Our Amiga, Atari and IBM users wish to thank you !!!

While it is true that our product costs more than that of our competitors, the extra spent will be well worth it. We welcome you to compare our customer support, service and copying ability with that of our competitors. We know that we rank No. 1 in all respects

With every Super Card AMI - II order received by July 15th you will receive NIB V2.0 absolutely FREE! Retail value: £22.99

NIB V2.0 The most popular American shareware copier joins the commercial market, NIB will backup most commercial software made today. Ease of use and reliability are the strong points of NIB. NIB will actually by-pass "documentation" style copy protection making you backup protection FREE! So if your tired of thumbing through pages of documentation and losing your original disks, get the most popular copier on the American market. NIB



THE PUNTERS COMPUTER PROGRAM

COURSEMENTER

Available for

• The ORIGINAL, and still the BEST computer punter's aid. Coursewinner V3 uses all the most important form pointers (past form, speed ratings, prize money, course statistics, jockey form, trainer form etc) to give a detailed assessment of every runner's chances, not just a tip.

 Vital statistics of all British courses (Draw advantage, Top Trainers and Jockeys etc) are included in the database.
 Includes both FLAT and NATIONAL HUNT versions. £24.00

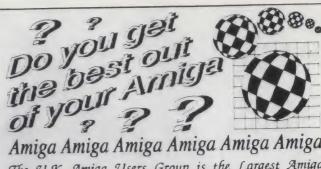
• Full Printer support

IBM (5.25", 3.5") Amstrad CPC AMIGA Atari ST Amstrad PCW

RRC Commodore 64/128 State TAPE or DISC (Add £2.00 for Disc).

Selec Software

62 Altrincham Rd, Gatley, Cheadle, Cheshire SK8 4DP Tel 061-428-7425



Amiga Amiga Amiga Amiga Amiga

The U.K. Amiga Users Group is the Largest Amiga only user group in the world. We are now in our fourth year and are the most established and experienced Amiga user group in the U.K. We have over 1,500 members and are able to offer an unrivalled level of support. Our members receive a 60+ page bi-monthly newsletter packed with articles of interest at all levels, we have a massive library of public domain software and run an Amiga only bulletin board. We offer our members superb discounts on all hardware, software and books. The U.K.A.U.G. is the group to belong to regardless of your age or level of experience, our aim being to provide support and encouragement to everyone. Why not join us and start to appreciate what Amiga computing is all about.

more info, ped The U.K.Arniga User Group send a stamped addressed and a stamped addressed and a stamped and a stamped addressed addressed and a stamped addressed addressed and a stamped addre 144 Charles Street LEICESTER LET 1LB 510066

Matrix Hire Makes the Software World Your Oyster!

Join the Matrix and enjoy access to our huge library of the most popular titles. For Amiga, Atari ST, Commodore and Amstrad machines.

For full details send large SAE stating your machine to:-

Matrix Leisure Club, Dept AM/F, 107 The Hyde, Church Park, Ware, Herts, SG12 0EU

Free Membership for quick replies.

A520 Modulator£17.99 **Genuine Commodore 1 Year Warranty** Prices include VAT & P&P.

Send Cheque/PO to: OMNIDALE SUPPLIES (Dept F1), 23 Curzon Street, Derby,

DE1 2ES. Tel: (0332) 291219



FIRST AID FOR

ATARI ST/AMIGA

Simply send your machine along with a £15 diagnostic fee and you will be sent a written quotation for the cost of repairing your machine.

* TYPICALLY £45, 1 WEEK TURNAROUND *

W.T.S. ELECTRONICS LTD, CHAUL END LANE, LUTON, BEDS, LU4 8EZ 0582 491949 (4 LINES)

TECHNOLOGY

THESE PRICES ARE MAIL ORDER ONLY

SOFTWARE HOTLINE 081-9039511

FAX HOTLINE 081-9000235

WE ALSO STOCK SOFTWARE AND HARDWARE FOR THE - AMIGA, IBM, PC, SEGA, C64, SPECTRUM, AMSTRAD, BBC, ELECTRON. ITLES Available

	Cracial Offa	r Of The Month O	TED FOO TI
8	Special Offe	r Of the Month O'	VER DUU II
Action Amiga	£20.99	Kingdoms Of England	€15.99
Advanced Dungeons & Dragons	£17.99	Lost Patrol	£16 69
Advanced Ski Šimulator	£4.99	Manic Miner	26 99
After Burner	£10.99	Mercenary	65 99
Airborne Ranger	£15.99	Microprose Soccer	£15.99
Aladdin's Magic Lamp	69 99	Mini Golf	£10.99
Antheads	£11.99	Mr Heli	£15.99
Backlash	£8 99	New Zealand Story	£15.99
Ballistix	£10.99	Nightdawn	£17.4Q
Batman The Movie	£16.49	Nitro Boost	00 k3
Battle Chess	£15 99	No Excuses	65.00
Battle Squadron	£14 99	Ooze	£16.49
Beach Voiley	£16.49	Operation Neptune	£16.49
Beam	£17.49	Pacland	£13.00
Blasterball	£4 99	Pacmania	£13.00
Blasteroids	£16.29	Personal Nightmare	£17.49
Blood Money	£15.99	Phobia	£14 QQ
BMX Simulator	£4 99	Police Quest	£15.00
Cabal	£16.69	Populous	£15.00
Captain Fizz	£8 99	Powerplay	26.00
Champions Of Krynn	£22 95	Promised Lands	£8 00
Circus Games	£14.99	Quadralien	£5.00
Cludeo Master + Detective	£14 99	Rainbow Islands	£17.40
Danger Freak	£10.99	Resolution 101	C16 00
Dragon Force	623.99	Rick Dangerous	C16 40
Dragon Ninja	£16.75	Rock Star Ate My Hamster	C4 00
Dragonsbreath	£19.99	Run the Gauntlet	C15 00
F-29 Retaliator	\$16.90	RVF Honda Simulator	C15 00
Fire Brigade	£17.90	SAS Combat Simulator	C4 00
First Contact	£15.00	Savage	24.99
Flying Shark	£15.00	Shadow Of The Beast - with free t-shirt	C1C 40
Football Manager - World Cup	£14.40	Sideshow	
Funschool 2 6-8	C13 75	Sidewinder	C4 00
Funschool 2 Under 6's	C13.75	Sim city	C10.75
Funschool 2 8 & Over	C12.75	Sir Fred	
Galdregons Domain	C14.00	Space Quest 2	
Garfield	C16 40	Space Quest 3	£17.99
Gemini Wing	C12 00	Spritz	£23.99
Gettysburg	C10.00	Starray	£5.99
Ghostbusters II	£16.75	Super Scramble	£7.99
Hard Drivin'	C12.60	Torreroads	£13.99
		Terrorpods	

2 FREE BLANK DISKS ARE GIVEN WITH PURCHASES OF 2 GAMES OR MORE.

MANY MORE GAMES IN STOCK NOT LISTED. PLEASE PHONE FOR DETAILS.

WE SELL EXTRA ACCESSORIES FOR ALL COMPUTERS

PRINTERS

Star LC-10	£159.00
Star LC-10 Colour	£209.00
Star LC 24/10	
Panasonic KXP1124	
Panasonic 1180	£178.00

AMIGA HARDWARE

Class Of The 90's	£524.99
A500 Batman Pack	£379.00
Flight Of Fantasy	£379.00
10 Games With Computer	
512K RAM	
2nd Drive	£86.25

MONITORS

112011120110	
Philips 8833	£249.00
Commodore 1084S	

DISKS

Unbranded	£0.46
JVC 10	£4.50

COMMODORE 64

Light Fantastic

WAXRIDE LTD. Wembley Computer Centre, 542 High Road, Wembley, MIDDX, HAO 2AA

Cheques or Postal Orders payable to WAXRIDE LTD. Post and Packing FREE in U.K. Overseas £1.50 per item. Subject to availability and price change without notice. Goods despatched on day of order. These prices are Mail Order only.

£16.75 £13.69 £13.99 £16.49 £16.99 £17.29 £17.49 £13.99 £15.99 £15.99 £14.99

Their Finest Hour

Tower Of Babel Treasure Island Turrican

BENCHMARK **DISKS AND BOX OFFER**

	10 3 1/2" DS/DD + 50 Cap. Box£10.95
l	20 3 1/2" DS/DD + 50 Cap. Box£18.95
ı	30 3 1/2" DS/DD + 50 Cap. Box£23.95
ľ	40 3 1/2" DS/DD + 50 Cap. Box£28.95
l	50 3 1/2" DS/DD + 50 Cap. Box£33.95
	20 3 1/2" DS/DD + 100 Cap. Box.£19.95
	40 3 1/2" DS/DD + 100 Cap. Box.£29.95
	50 3 1/2" DS/DD + 100 Cap. Box.£34.95
l	70 3 1/2" DS/DD + 100 Cap.Box£44.95
	100 3 1/2" DS/DD + 100 Cap. Box.£55.95

wkeye ana Jones Last Crusade

nhoe an Of Arc urney To The Centre Of The Earth onedy Approach

Off 2 + World Cup Plus.

DISK BOXES

3 1/2" 50 CAPACITY 3 1/2" 100 CAPACITY	£5.25 £6.50
BOTH ABOVE INC. LOCK & DIV	IDERS
3 1/2" 10 CAPACITY LIBRARY	CA 75

BENCHMARK **DISKS DS/DD 135TPI**

25	£15.95
50	£27.95
100	£49.95
200	£92.95
400	

COLOURED BENCHMARK IN RAINBOW PACKS OF 5 COLOURS, RED, YELLOW, GREY, GREEN AND FOG WHITE.

25£	17.95
50£	34.95
100£	63.95
200£1	17.95
400 £22	23.95
Inc Lahels	-0.00

All Benchmark Disks carry a lifetime warranty. If your data is important then buy Benchmark Brand.

UNBRANDED **DS/DD 135**

All disks 100% cert. & guaranteed

100£44.00
200£84.00
400£160.00
600£235.00
800£302.00
1000£364.00
Inc. Labels

DATA SWITCHES AND CABLES

2 way 36 pin Cent£14.50
2 way 25 pin D-Type£12.50
X Over 36 pin Cent£19.22
X Over 25 pin D-Type£18.22
All lines switched.
Amiga Printer Cable 2 mtr£7.25
36-36 Cent m/m 2 mtr£8.25
25-25 D-Type m/m 2 mtr£7.25
All lines connected.

AMIGA **DISK DRIVE**

AMIGA 3 1/2" EXTERNAL DISK **DRIVE 1 MEG (880K)**

- FOR AMIGA 500 or 1000
- ON/OFF SWITCH
- THROUGH PORT
- QUIET MECHANISM SLIM CASE (METAL)
- 1 YEAR WARRANTY

OUR PRICE £64.50

EXTRA LABELS 3 1/2"

100 3 1/2" LABELS£3.50
500 3 1/2" LABELS£10.00
1000 3 1/2" LABELS£15.00

ALL PRICES INCLUDE VAT & P&P. UK ORDERS ONLY

MOUSE AND BITS

Replacement Mouse for Amiga	£19.99
Rigid Double Sided Mouse Pad	£4.50
Mouse Pocket	£2.50
Rigid Pad & Pocket together	£6.00

ACCESSORIES ETC.

2 Piece Universal Printer Stand	£6.75
14" Tilt & Turn Monitor Stand	
Printer & Monitor Stand together	

Cheques and



Postal Orders to: 24 HOUR ORDERLINE 0597 87784

Manor Court Supplies Ltd

OFFICE 9AM-5.30PM Mon-Fri

Telephone: 0597 87 792 Fax No: 0597 87 416 Dept AF9, Glen Celyn House, Penybont, Llandrindod Wells, Powys, LD1 5SY

EDUCATION AND GOVERNMENT ORDERS WELCOME



THE GRAVIS SWITCHSTICK

Simply a better joystick. Made to a standard not just to a price.

- * Great For
- Simulators Comfortable for Hours
- **Highest Quality** Programmable Buttons
- 1 Year No Quibble Guarantee



- 8 Tension Settings
- * No Click
- Ultra Fast Response
- 6 Foot Cable
- Only £39.91

R.C. SIMULATIONS/VIRTUAL REALITY Beehive Trading Estate, Crews Hole Road, St. George, Bristol BS5 8AY Tel: (0272) 550900. Fax: (0272) 411052 Send S.A.E. for details.



ST & Amiga Digitising Service

Not only do we digitise your pictures (up to A4 size) in any Amiga format or resolution, we send your pictures back to you as an auto-booting slideshow! Over 1000 satisfied customers - including Psygnosis (Shadow of the Beast) and RGB Studios (Real Things).

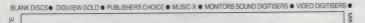
Almost 2000 mono IFF line art pictures on 7 disks! Ideal for DTP, Deluxe Paint, Photon Paint, Pen Friend, animations etc. Hundreds of subjects covered! Available

only from Photofile for just £35.00

Digitising costs - £1.75 per colour picture and £1.25 per b&w, picture, HAM, Halfbrite, Lo-res, High-res Interlace or Overscan if required.

<u>Please add £3.00 per order for setup, Kodak disk and P&P.</u> Send £3.00 for our demo disk of digitised images or an SAE for our advice and information sheet. Please make cheques/P.Os payable to Photofile, PO Box 49, North PDO, Nottingham, NG5 6SR Phone (0865) 742182 for enquiries or Access/Visa orders.

Graphics House, 3-6 Collin od Road, Headington, Oxford



LONDON'S

HOT, HOT, HOT **PRICES**

SONY VERBATIM, MITSUBISHI BULK DISCS

THE BUSINESS COLLECTION

KINDWORDS 2, K-SPREAD, K-DATA

A596 HARD DRIVES ● EXTERNAL DRIVES ● EXPANSIONS FOR A500 ● MINIGEN ● JOYSTICKS, MOUSE MATS ● A500 AMIGA

MORDENA

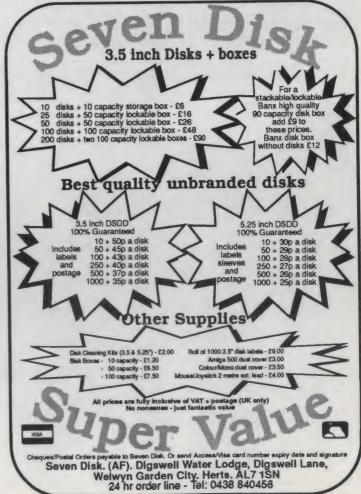
9 CROWN PARADE **CROWN LANE** MORDEN SURREY SM4 5DA

CYB COMPUTERS

TEL: 081 542 7662

R.R.P. 159.99 GOLD . PUBLISH AMIGA CENTRE

SPECIALIZING IN ANYTH DO WITH THE AMAZING



plonker for writing such utter rubbish. We are all entitled to our opinions but this letter really got up my nose. To suggest that computer games were violent is not true at all. I am a father and have a son of 17 and we have had a computer in our home for some five years now and I firmly believe that if a child receives from an early age the love and security that a child needs and this is maintained throughout their childhood, then you will, in most cases, bring up and into the world a perfectly normal child, even though that child may well enjoy blasting aliens to hell.

Parents like to go out for a drink to meet others and let off steam and children need to also. On the subject of the games themselves, I have occasionally played games on our computer and I fail to see what is harmful at all. The game may in a lot of cases be from a film but is hardly frightening or disturbing as the film may be. To me the fun that the player gets out of the game is to win and that is something we all want to do throughout our lives. I also firmly believe that the games in themselves are a great source of entertainment and make the player use the human brain to find the clue or work out the game play to win which, in the end, helps to develop the mind.

To sum up, too many children today are left to get on with their own lives and create their own world to live in instead of supportive and loving parents to guide them, but so many are bought expensive toys and left to get on with it so the parents do not have to bother.

Martin Fryatt York, North Yorkshire

Sorry that my first ever letter to a magazine has to be one of complaint but it is. I am writing to complain about the letter written by Dr Bell in AF 13. I am annoyed with him and his 'Child Psychiatrist' point of view and so I thought that I would defend the side of the children, being somewhere in the middle at 14. While it may be more likely for children, indeed anybody, to be more aggressive after watching violent films, I find it very unlikely that shooting pixels to pieces would have any bad effect on a child's mind. Indeed, I have known it to have a very good effect on them as they get rid of all their aggression on the computer screen and have none left at the end.

Dr Bell says that almost all of the children with emotional or behavioural problems had experi-

ence of great marital disharmony and computers. Most children nowadays have home computers. Anyway, is the computer not used to block out the real world of arguments, like books and television have been before the computer was invented? People with troubles will always try and find some form of escapism, and a computer is more interactive than a book. When you are reading an Agatha Christie you don't then go out and murder someone and so I see no reason why you should play Barbarian and then get up, buy a sword, cry "eeee yich" and chop someone's head off. Total rubbish.

Dr Bell sounds to me the sort of person who will, as I have stated my age, believe that I am 'only a spotty adolescent who is just bad tempered because he is going through the crises of adjustment' but I want to set Dr Bell straight. Thanks for listening because I really feel that children have been getting a raw deal as there is no one to speak for them.

Ben Gribbin Piddinghoe, East Sussex

PS My mum has got a degree in child psychology and she thoroughly enjoys the computer too.

On the letter headed "Problem Children" from one Dr Bell:

- 1. I agree with you that most children have an excellent grasp of the difference between reality and fantasy.
- 2. Unreal violence is usually tension relieving (you can take your frustration out on a game without hurting anyone).
- Dr Bell's reference to Hungerford is both inappropriate and irritating. It has to be emphasised that Michael Ryan was clinically insane - no one could plausibly blame that on computers, which appears to be the implication. This is in fact similar to the way that some elements of the attempted to blame Hungerford on RPGs (the dice and pieces of paper variety, not on computers). Since one of my other hobbies is roleplaying, I did some research into this claim, which was based entirely on a letter which Ryan supposedly received from a PBM (Play By Mail) RPG company, telling him to go out and kill.

This would all be well and good – except that the letter does not and did not exist. It was a complete fabrication.

4. Dr Bell's casual remark "Legislation re both professional and public domain software is needed", is probably the most frightening aspect of the letter – I would suggest the he read

Allaister Crowley, or if this is not possible, here's some I prepared earlier: "Do what you will is all parts of the law".

To be rather more blunt – in my opinion, legislation is never needed, and indeed should be actively fought against.

S J A Clark Birkenhead, Merseyside

Having read Dr A J Bell's letter headed "Problem Children" in Issue 13, I feel I must comment.

Dr Bell said that, currently working in the field of child psychiatry, he has noticed two common features among children with emotional and behavioural problems. Firstly, that they are often from homes in which there is marital disharmony and separation and, secondly, that they almost all possess home computers.

Come on, Dr Bell, that is hardly scientific. Should you care to look among a 'control' group of, say, children without emotional and behavioural problems, I'm sure you'll find that almost all of those children also possess home computers. Home computers are very common. Especially C64s, Amigas and Spectrums.

On that basis, suggesting that children are disturbed because they possess home computers is like saying that they are disturbed because they have two legs, which I am sure almost all of the children you have studied also possess.

That rather important point aside, Dr Bell does make some reasonable comments about computer violence, although I cannot entirely agree with them. Certainly, in my opinion, it is not computer and video games that are responsible for breeding a violent culture. Perhaps, in some way, they reflect it, but I agree with Bob Wade's comment that, generally, children are perfectly able to differentiate between zapping aliens in escapist

computer games and real life. In fact, I would go so far as to suggest that computer games may, in many ways, act as a reasonable channel for pent-up "hostility" that is far better spent zapping a few imaginary aliens than beating up grannies or destroying other people's property.

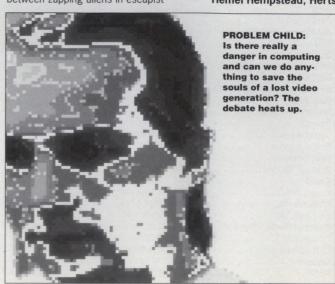
Of course, modern technologies have had their effect on human behaviour – none of us who have ever sworn at British Telecom would have done so if the telephone had not been invented! However, if anything, I feel that it has been the likes of television news coverage that has done most to cultivate an "increasingly violent culture", rather than violent computer and video games.

Through the shock-horror-serious-expression-aren't-we-a-caring-nation coverage of the world's disasters and horrors, we have become de-sensitised to horror, violence, war, murder, disaster and deprivation. How many of us can now look at pictures of starving children in Africa and really and truly feel as appalled as we may have done, say, ten years ago?

I accept that "observational learning" is a true phenomenon and that children pick up behaviours and attitudes from their environments but I do not accept that computer games, generally, present either behaviours or attitudes. They are simply there.

Although I am not a personal fan of either "Rambo" or martial art-type games, I do not see that they present an attitude that children are likely to blindly copy. Children are more likely to copy the attitudes of people around them than copy a cartoon sprite in a computer game that they are forced to turn to when, perhaps, their parents don't give them the attention they deserve.

Kevin Patton Hemel Hempstead, Herts



Guru's Meditations

Yes, this page is becoming more popular all the time!

THE GREAT GURU COMPETITION

Entries for the competition to change the Guru page have been flooding in in their twos and threes - clearly the subject has been close to the heart of many a reader of Amiga Format. So far no clear winner has emerged, but a big surprise so far has been the number of people who support the old-fashioned Guru. Could it be innate conservatism? Could it be that people appreciate the wit and wisdom of this last page? Probably not - although the views of one particular reader in Holland should be read on the Letters pages for a nice, positive view of Guru.

Meanwhile, back at the entries. Quite a few readers have suggested that this page should be used to display a piece or two of readers' artwork, perhaps with a prize as well. Obviously, only pictures of great excellence would

qualify and this would also probably mean turning tis into a fullcolour page, which might be awkward from the production point of view. Still, if it is technically possible we would certainly consider it. What do you think?

Other suggestions include a technical jargon-busting page, deicated to putting things more simply: a Basic program listing for you to type in: a blank page that readers can rip out, solving the problem of having a last page: and using it as a kind of writing competition page, so readers can write thought-provoking or humorous pieces for the benefit of all.

So far, the most likely idea to win the competition is to print a questionnaire answered by a famous person, rather like they do in the magazine of the Sunday Correspondent newspaper.







New Faces!

The ugly mugs on the left are the latest new faces on the Amiga Format staff. They are, from top and in no particular order, Paul Morgan, new Art Assistant, Pat McDonald, a fresh Technical Editor and Trenton Webb, who takes on the glorious mantle of Reviews Ed. Welcome aboard, guys!

NEXT MONTH

Next month brings Issue 15, yet another milestone in computer mag history. A massive issue should contain such stuff as dreams are made of - the CDTV, multimedia, ray-tracing, 68020 and 68030 cards, fractal landscapes, sound samplers and much more besides, plus all the usual in the biggest and best!

16 Bit Centre	110
17 Bit Software	76
Activision1	8, 43
Advantage	132
Alternate Image	140
Amiganuts	89
Amiga PD	99
Ampower	168
ARK	157
Arnor	158
Arrakis PD	83
Ashcom	90
Athene	142
Audiogenic	58
Audition Computer Services.	122
BBD	165
BCS	173
Beat This Amiga	80
Bed Rock	89
Belshaws Computer Shop	148
Best Byte	162
Bit On The Side	94
Bitcon	32
Blitterchips	99
Bruce Everist	176
Byte Back	70
Bytes & Pieces	128
Calco	161
Capricorn	83
Checkmate	139
Compuchat	148
Computerwise Brighton	113
Crazy Joes	96
CYB Computers	176
Dataplex	169
Datel72.73.	74.75

recpei bomain	
Delta Leisure	.168
Delta Pi	90
Demon Software	84
Digicom Disk Express	30
Disk Express	.151
Dowling	.104
OS & K Designs	.141
Ealing	.152
Electronic Arts	6,7
Elite Electronics	.142
Elite Systems	25
EMAP	.109
EMPDL	80
Eprom	99
Furopean Peripheral Dist	.133
Evesham126	,127
First Choice	.113
Evesham126 First Choice	.107
GTI	.140
Guiding Light	.148
Hammersoft Hampshire Micros	90
Hampshire Micros	.157
Harwoods1	6,17
Hobbyte	.152
Hobbyte Home Based Business	.107
HR Software	161
Impex - Ilkeston	173
Infogrames	13
Inpholink	140
Instamec	107
Interface Software	139
Intermediates	33
Intraset	107
JD Lewis	173
JTS	80

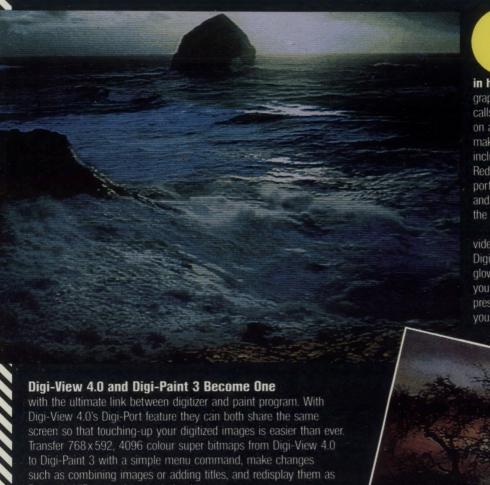
key soltware	
Kosmos	165
Ladbrook	
LCL	168
Magnetic Media	84
Manderin Software	8
Manor Court	175
Matrix Software	174
MD Office Supplies	86
Media Direct	146
Memory Expansion	125
Merlin Express	22
Microsmart	130,131
Microsnips	89
Mindscape	49
Mirrorsoft	10, 47
Mistral	152
MJC	120
MPH	162
Music Matrix	113
NBS	84
New Dimensions	113
New Image	96
Newtek	180
Nortek	103
Nova PD	96
Nova PD	3, 50, 179
Omnidale P. Dom PD	174
P. Dom PD	93
Photofile	176
Power Computing62, 6	53, 64, 65
Power Domain	83
Premier PD	84
Proton	122
Psygnosis	34, 44

Railisoit	100
RC Simulations	.176
Recoil PD	80
Riverdene	96
Sagittarian	99
Sector 16	96
Selec	.174
Senlac	94
Seven Disk	
Seven Seas	99
Siren Software	
Soft Machine	.141
Softsellers100,	155
SoftvilleSoftware Business	83
Software Madness	.173
Software Superstore67,	156
Solid State	.134
Solid State	.144
Start Computers	94
State Of The Art	55
Stone Mail-Soft	.148
Supervision	96
TAM Marketing	.157
Third Coast2	6,27
Trilogic	.118
Turbosoft	.115
UK Amiga User Group	.174
W.T.S55, 144,	174
Watford College	.162
W.T.S	.175
WCA	89
Worldwide	.142
Yuppies	100



IGI·VIEW GOL

4096 Colours in High Resolution...is just the beginning



Dynamic HiRes or other resolution images.

Only Digi-View Gold:

- Digitizes in all Amiga resolution modes from 320 x 256 up to 768 x 592 (full HiRes overscan)
- Includes powerful Digi-Paint 1 software for retouching digitized images or creating original artwork
- Uses 2 to 4096 colours (including halfbrite)
- Has exclusive Dynamic modes for 4096 colours in HiRes
- Digitizes in 21 bits per pixel (2.1 million colours) for the highest quality images possible
- Has advanced dithering routines that give an apparent 100,000 colours on screen simultaneously
- Has a special line art mode for desktop publishing
- Comes with an icon driven slideshow program for presentations using both IFF and Dynamic images
- Has complete software control of colour saturation, brightness sharpness, hue, resolution, and palette
- · Digitizes in full overscan with no borders for use with video genlocks
- Offers an unprecedented lifetime warranty

If you want the best graphics possible for your Amiga, then get the best selling video digitizer of all time: Digi-View Gold.

Only £149.95 For a New Tek authorized dealer near you contact HB Marketing, Ltd. at 0753 686000

Now includes Digi-Paint 1

INCORPORATED

*Requires standard gender changer for use with Amiga 1000. Dynamic HiRes requires 2-megs of RAM. Digi-View Gold is a trademark of NewTek, Inc.

ith the all new Digi-View 4.0 software you can do the one thing most people thought was impossibledigitize and display all 4096 colours in high resolution! We call this revolutionary new graphics mode Dynamic HiRes. Amiga Format magazine calls it "breathtaking, easily the best images ever seen on an Amiga screen." But that's just the start of what makes Digi-View 4.0 a breakthrough. Other new features include: Dynamic HAM (fringe free HAM), Noise Reduction (for the sharpest images ever), ARexx support, super bitmap digitizing, 24 bit colour support and dozens of other new features making Digi-View Gold the hottest Amiga graphics product ever. And it's still just as easy to use. Simply focus your video camera on any object or picture, and in seconds Digi-View Gold turns it into Amiga graphics that glow with vibrant colour and stunning clarity. Whether you are creating graphics for desktop publishing, presentations, video, or just for fun, Digi-View Gold gives you dazzling images with amazing simplicity

